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County Borough of Reading

ANNUAL REPORT

OF THE

School Medical Officer

FOR THE YEAR

1957

By

E. HUGHES, M.D., D.P.H.

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COUNTY BOROUGH OF READING

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READING EDUCATION COMMITTEE

(as at 31st December, 1957)

HIS WORSHIP THE MAYOR (Alderman Thomas Stephen William Smart)

Aldermen :

ARTHUR FRANK CLARK
GEORGE WILLIAM HOLLEY
JEREMIAH JOHN DWYER
THOMAS WILLIAM KNIGHT

Councillors :

CHARLES EDWARD BUCK
WILLIAM DAVID GOWING
ARTHUR LOCKWOOD
ETHEL LOUISA MORAN
DAVID LEONARD STODDART
FRANCIS TAYLOR (*Vice-Chairman*)
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EDWARD ALBERT BUSBY
EDWARD WILLIAM LEWIS
EDITH ELLA LOVETT
JESSIE ANN MURRAY
ALEXANDRA GEORGIA ANDERSON
STURROCK (*Chairman*)
EDWARD THOMAS WALTHAM

Co-opted Members :—

The Very Rev. Canon J. P. MURPHY
The Rev. D. T. DAVIES
The Rev. R. S. PARKES
The Vice-Chancellor, University of Reading
(Sir JOHN F. WOLFENDEN)
Professor C. H. DOBINSON
E. F. ALLWOOD, B.Sc.
W. C. COSTIN, O.B.E.
F. PHILLIPS
A. J. ROBINSON
Mrs. H. D. KAY
Miss D. M. MILES

STAFF AT DECEMBER 31st, 1957

Principal School Medical Officer :

E. HUGHES, M.D., D.P.H.

Deputy Principal School Medical Officer :

G. M. O'DONNELL, B.A., M.B., D.P.H.

School Medical Officers :

VIOLET FRASER, M.B., B.S., M.R.C.S., L.R.C.P.
ETHEL AMY FISHER, M.Sc., M.B., B.Ch., D.R.C.O.G.
B. A. SMITH, M.B., B.S., D.P.H.
URSULA MARY ANDERSON, M.B., Ch.B., M.R.C.S.,
L.R.C.P., D.P.H. (Commenced 21st January, 1957)
H. I. LOCKETT, M.B., B.S. (Commenced 1st September, 1957)
(on D.P.H. course from October, 1957)

Principal Dental Officer :

J. CAMPBELL, L.D.S., R.C.S. (Ed.)

Speech Therapists :

ANN C. ELSBURY, L.C.S.T.
ELIZABETH M. FAIRS, L.C.S.T. (Commenced 2nd September, 1957)

Superintendent Health Visitor and School Nurse :
MISS M. WEBBER, S.R.N., S.C.M., H.V.

School Nurses :

Mrs. H. KING
Miss M. PLATT
Mrs. J. LEWIS (Part-time)
(Commenced 1st October, 1957)
Mrs. T. PORTER (Part-time)
Mrs. J. MIDDLETON (Part-time)
(Commenced 15th July, 1957)
*Mrs. A. ALLISON
*Miss F. CLARK
*Miss F. GATES
*Miss M. GRANT, (Commenced 9th December 1957)
*Miss S. HANSFORD (Commenced 9th December, 1957)
*Miss O. JARVIS
*Mrs. L. KINGSLEY (Part-time)
*Miss. H. MORTIMER
*Miss J. SMITH (Commenced 24th September 1957)
*Miss R. UPTON
*Miss M. WILLIAMSON
*Miss M. WORDEN (Commenced 7th February 1957)

*Combined Health Visiting and School Nursing Duties

Oral Hygienist :

Mrs. V. TAYLOR

Clinic Assistants :

Mrs. D. BOXALL
Miss B. J. McMANUS
Mrs. R. NEALE

Senior Clerk :

Miss W. M. DIX

READING SCHOOL HEALTH SERVICE

To the Chairman and Members of the Education Committee

Ladies and Gentlemen,

I have the honour to present my report on the School Health Service for the year ending 31st December, 1957. Detailed comments on the many aspects of our work are included in the body of the report, and therefore, I have not referred to them in this introduction. You will see that, in addition to a large amount of routine work a number of special investigations have been carried out and our work with deaf children continues to arouse interest in many places.

Once again I would like to express my thanks to the Chief Education Officer, his office staff, and all teachers in Reading Schools for the help they have given us throughout the year. It is due in no small measure to their assistance that our poliomyelitis vaccination scheme is running so smoothly. I must also thank the Chairman and members of the Welfare Sub-Committee of the Education Committee for the interest and support they have given to this Department throughout the year. My thanks are also due to my own staff for their loyalty and hard work, more especially to Dr. G. M. O'Donnell for his great interest in the work of the School Health Service and his supervision of the compilation of this report.

I am,

Your obedient Servant,

E. HUGHES,

Principal School Medical Officer

ESTIMATE OF THE NUMBERS OF CHILDREN BETWEEN THE AGES OF 5 AND 15 YEARS IN EACH OF THE NEXT FIVE YEARS

	Between 14 & 15	13 & 14	12 & 13	11 & 12	10 & 11	9 & 10	8 & 9	7 & 8	6 & 7	5 & 6	Total	Increase	Decrease	Cumulative incr. or decr.
31st Aug., 1957	1,624	1,696	1,690	1,763	2,141	1,912	1,777	1,706	1,661	1,650	17,620	—	—	—
31st Aug., 1958	1,696	1,690	1,763	2,141	1,912	1,777	1,706	1,661	1,650	1,587	17,583	—	37	— 37
31st Aug., 1959	1,690	1,763	2,141	1,912	1,777	1,706	1,661	1,650	1,587	1,562	17,449	—	134	—171
31st Aug., 1960	1,763	2,141	1,912	1,777	1,706	1,661	1,650	1,587	1,562	1,561	17,320	—	129	—300
31st Aug., 1961	2,141	1,912	1,777	1,706	1,661	1,650	1,587	1,562	1,561	1,579	17,136	—	184	—484
31st Aug., 1962	1,912	1,777	1,706	1,661	1,650	1,587	1,562	1,561	1,579	1,729	16,724	—	412	—896

SCHOOL CLINICS

QUEEN'S ROAD CLINIC—

Minor Ailments	Daily, 9 a.m.-10 a.m.
Ultra Violet Light Therapy	Monday, 2.30 p.m., Friday, 10.30 a.m.
Ringworm Clinic	Wednesday, 2 p.m.
Remedial Exercises	Tuesday, 2.30 p.m.

WHITLEY CLINIC—

Minor Ailments	Daily, 9 a.m.-10 a.m.
Ultra Violet Light Therapy	Monday and Wednesday, 12.45 p.m.

CAVERSHAM CLINIC—

Minor Ailments	Monday, 9 a.m.-10 a.m.

ASHMEAD SCHOOL CLINIC—

Minor Ailments	Friday, 2 p.m.-3 p.m.

BATTLE SCHOOL CLINIC—

Minor Ailments	Daily, 9 a.m.-10 a.m.

EMMER GREEN SCHOOL CLINIC—

Minor Ailments	Friday, 9 a.m.-10 a.m.

GEOFFREY FIELD SCHOOL CLINIC—

Minor Ailments	Wednesday, 9 a.m.-10 a.m.

HILL SCHOOL CLINIC—

Minor Ailments	Wednesday, 9 a.m.-10 a.m.

GROVELANDS SCHOOL CLINIC—

Minor Ailments	Monday and Friday, 9 a.m.-10 a.m.

ST. MICHAEL'S SCHOOL CLINIC—

Minor Ailments	Wednesday, 9 a.m.-10 a.m.

SOUTHCOTE PRIMARY SCHOOL CLINIC—

Minor Ailments	Tuesday, 9 a.m.-10 a.m.

STONEHAM SCHOOL CLINIC—

Minor Ailments	Tuesday, 9 a.m.-10 a.m.

WESTWOOD SCHOOL CLINIC—

Minor Ailments	Monday, 9 a.m.-10 a.m.

DENTAL CLINICS—

Queen's Road Clinic
Whitley Clinic

SPEECH THERAPY CLINICS—

Ashmead School	1 Session	Geoffrey Field School	1 Session
Avenue School	3 ,,	Grovelands School	1 ,,
Battle Hospital	2 ,,	Hill School	1 ,,
Battle School	1 ,,	Queen's Road Clinic	7 ,,
Emmer Green School	1 ,,	St. Michael's School	1 ,,
E. P. Collier School	1 ,,	Southcote School	1 ,,
		Whitley Clinic	2 ,,

NUTRITION

The following table relates the number of children showing evidence of poor nutrition, diagnosed at periodic medical inspections, over the past five years :—

1 Year	2 Pupils medically inspected	3 Poor Nutritional Standard No.	 % of Col. (2)
1953	4,827	39	0.8
1954	4,754	35	0.7
1955	5,530	20	0.3
1956	5,124	25	0.4
1957	5,621	13	0.2

Perhaps the most reliable evidence of the social and economic condition of a community is that presented in the physique and well-being of the children. Financial stress almost invariably induces changes in the dietary and the substitution of the cheaper carbohydrate foods in place of proteins and fats. If the period of recession is prolonged this substitution becomes apparent not only in the appearance of cases of frank malnutrition but also in a general diminution of the vivacity and concentration of the children and an increase in the incidence of minor illness. Conversely, times of economic acceleration occasion a quick return to the more expensive and delectable foodstuffs and this improvement is soon manifest in the body and bearing of the child. The steadily decreasing incidence of cases of malnutrition in Reading during the past decade is a potent witness to the prosperity and good fortune of its residents, particularly as the 13 cases quoted for 1957 represent the lowest number yet achieved. To Henry of Navarre, a chicken in the pot each Sunday was the utmost bounty that sixteenth century prodigality could envisage for the man in the street. A glimpse of the cornucopia that is poured out today at the average table in this town would show that essentially sanguine monarch how modest was his prediction.

SCHOOL MEALS SERVICE

The following report has been received from Miss P. E. Hall, the School Meals organiser :—

The year 1957 will be remembered in the School Meals Service for two main reasons. First the epidemic of Asian flu, in the autumn, which caused many absences of pupils and staff, and second, for the Ministry of Education Survey, which took place in May.

The Survey is similar to a general inspection of a school. Every aspect of the service was considered, and a very thorough inspection made. Visits were made to every kitchen, and 44 schools where children dine. Her Majesty's Inspectors were very satisfied with the hygiene in the kitchens, which showed the value of training in correct handling of food and utensils. They considered that the menus were well balanced, and varied, and that the standard of cooking and finish to the dishes was good. It was noted that the kitchens were provided with suitable equipment. The arrangements for the maintenance of heavy equipment by contract, together with the excellent care given by the staff, has resulted in well-kept kitchen equipment. It was considered that dining arrangements might be improved in some schools, and that water should be available at the meal.

In order to improve the dining arrangements in some schools, the work of the School Meals Staff has been reorganised, and water has already been provided in many schools. The Committee has also agreed to provide overalls for these members of staff to wear on duty.

Special mention was made of the breakfasts at the Avenue School, which had a high content of animal protein, and are given to specially selected delicate children.

The report concluded that high standards had been attained in all the aspects of kitchen organisation, and that attractive, well-cooked meals were provided, having a good nutritional standard.

In February, 1957, a new servery was opened in the extension building of Manor Primary School. Two new serveries have been built at the Oxford Road Schools, in order to comply with the hygiene regulations. These have made it possible to provide really good dining facilities in these schools.

Westwood Secondary Girl's School Canteen opened in September and supplied approximately 450 meals daily. The " Family Service " was introduced at this school. The girls sit at tables for 8, and each table has a dish of meat, vegetables gravy, sauces, and sweet, so that the girls can help themselves. This type of service appears to be very popular with the girls.

The enthusiasm of the staff for their work is often noticed and encouraged at their Conferences. This year, the Annual Conference was held in May, at Caversham, when there was an excellent attendance of members. Time was allowed for discussion of methods of work in the kitchen, and recipes had been collected and were exchanged. Both these new items proved popular.

Ten members were accepted for a week-end Conference held at Southampton in September, which was arranged by the Organisers of six local Authorities. The very varied talks and demonstrations were extremely interesting and every question time was very lively. The opportunity of talking to other people, all doing the same sort of work in different areas, is most valuable.

On the 1st April, the price of the meal to the children was increased from 10d. to 1/–. This resulted in a reduction of meals required, which in its turn, brings the usual difficulties of reducing the working hours of the staff, as well as reducing the number of staff employed, and at the same time increasing the cost of overheads per meal.

In order that the general public should have an opportunity of seeing for themselves the kind of meals that are prepared daily for the children, all the kitchens in the Borough were open for a week in the middle of November. Anyone could visit a kitchen at any time except during the service of a meal. Some of the comments were interesting. Many people commented on the good quality of the ingredients used. The menus, bottled fruit and home-made chutney, also caused surprise. As usual, the cleanliness of the kitchens, etc., was commended. Those who saw the weekly records were surprised that so much information is required, but they will, it is hoped, agree that it helps to ensure that the meal provided is of a high nutritional standard for the children, and that the money allowed is well spent.

HANDICAPPED CHILDREN

In an age when a renaissance of medical art and science has overcome so many of the fatal or crippling diseases, the lot of the severely handicapped child is doubly hard. In sombre contrast to the free and vigorous life of the normal child, to whom the prospects of continuing good health were never more assured, the handicapped child may have little joy of the present and an understandable fear of the future. This latter trait is particularly true of those with a progressive physical incapacity or ultimately fatal disease who, however carefully sheltered from the knowledge or consequences of their affliction, seem always to be as well informed upon these matters as their physicians. This dread of the future, which may consciously or unconsciously subvert the spirit, is a mental attitude almost unknown to the normal child whose never failing panacea for present injustice or unhappiness is the Elysium that another year or two will bring. To dilute this fear, enabling the child to overcome his handicap or at least come to terms with it, can only be achieved by convincing him that there is a niche for him in the adult world which he can occupy without loss of mutual or self respect and that this can be obtained by his own efforts. The choice of a suitable form and place of education where these efforts can best be realised, is the duty in which School Medical Service and Education Department most intimately combine. It is also the duty in which their enterprise may be most agreeably rewarded.

(*a*) *Blind*—One boy attends Condover Hall, Shrewsbury, and a girl is resident at Sunshine House Nursery School, Leamington Spa. One other girl who was on the register during most of the year was reclassified as partially sighted and will be admitted to a partially sighted school early in 1958.

(*b*) *Partially Sighted.*—Three girls are resident at Barclay School, Sunninghill, and two boys at Blatchington Court, Seaford. A third boy waits admission to the latter school.

(*c*) *Deaf.*—At present there are four boys and one girl classified as deaf. Two boys attend the Royal School for Deaf and Dumb Children, Margate, one attends St. Thomas' School, Basingstoke, and the fourth child is at Nutfield Priory. The girl has been at St. John's School, Boston Spa, for some years.

(*d*) *Partially Deaf.*—Four boys and four girls who are partially deaf are receiving treatment in residential schools. Three boys and a girl attend Donnington Lodge Nursery School and the remainder attend Ovingdean Hall, Brighton. A further eight children of junior school age, five boys and three girls are pupils at the Palmer School Unit, and three infant children, all boys, have been admitted to the newly formed New Town School Unit, which is described later in this report. Thirty-eight boys and twenty-three girls with hearing defects, which warrant a favourable position in a normal class, or the use of a hearing aid, are at present under observation. In addition, thirty boys and sixteen girls referred from the audiometric survey are seated advantageously in class and kept under observation.

The following table summarises the distribution and sex of those children in the total school population of 18,303, known to have a hearing defect :—

	Boys	Girls	Total
At residential schools	8	5	13
In Reading units	8	3	11
In normal schools	68	39	107
			131

Progress of Children attending the George Palmer School Unit

The progress of children admitted to the Unit since its inception is depicted in Tables 1 and 2. Table 1 gives a brief account of the origins, hearing loss, educational advancement, and disposal of the individual child, while Table 2 is a composite speech audiogram in which the discrimination scores for each ear (at each intensity) of all pupils were added together and averaged. The curves, therefore, represent the mean hearing for speech of all children before and after training, and the difference between the graphs the mean gain in ability to discriminate speech. It is not intended

CONCENTRATION at Palmer

Here the older children are following a tape recorded reading lesson while the teacher undertakes individual remedial teaching.

at the present moment to analyse in detail the individual accomplishments but it is hoped that a further exposition of these results and the means by which they were obtained will be included in next year's report. Suffice it to say that the all-round improvement in education and speech, so well illustrated by the return of five children to normal class at George Palmer School, is a pointer to the success of the unit. Periodic attainment tests have shown that the children who have been returned to a normal school continue to hold their own alongside hearing children of similar intelligence and their teachers report that there have been no communication difficulties with these children. Children remaining in the unit also progress in every way. The headmistress and others who see the children regularly comment on the remarkable way in which the children gain in confidence and stability. A noteworthy feature of the unit is the facilities it affords for social intercourse with normal children. All the partially deaf children have a number of friends in the school and hearing playmates at home, from whom they unconsciously learn normal behaviour patterns and communication skills.

TABLE 1

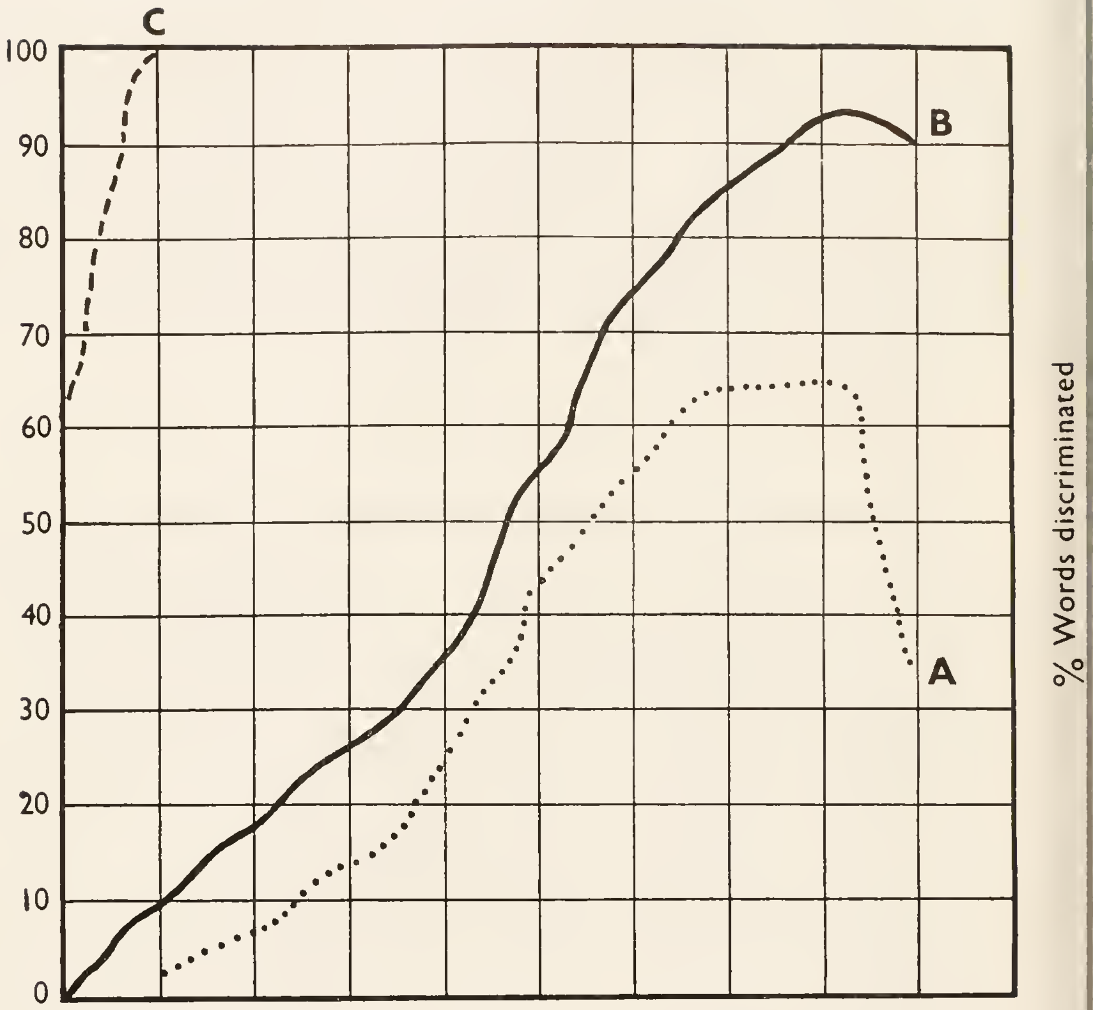
Name	From	To	Hearing Loss		Type			Educational Progress	
			L.	R.			Age	Mech. Arithmetic	Reading Age
T.A.	Ordinary School May 1956	Residential School for speech defects	40	32	P. (partial)	Initial	9.0	nil	nil
						Final	10.5	8.2	7.6
C.B.	Res. School for partially deaf Jan. 1956	at George Palmer Unit	94	90	P. (profound)	Initial	7.9	7.2	nil
						Final	9.6	8.8	8.7
B.D.	Ordinary School Jan. 1956	Normal class Sept. 1956	63	48	P. (severe partial)	Initial	6.9	nil	nil
						Final	8.7	10.2	11.4
L.G.	Ordinary School Sept. 1956	Normal class Jan. 1958	63	30	Mixed (severe partial)	Initial	8.8	7.2	7.9
						Final	9.9	10.8	12.0
E.G.	Ordinary School Nov. 1956	at George Palmer Unit	68	65	P. (severe)	Initial	6.10	nil	nil
						Final	8.10	9.2	8.5
T.H.	Earley Nursery Sept. 1956	at George Palmer Unit	73	47	P. (severe partial)	Initial	6.4	nil	nil
						Final	7.5	7.6	7.2
R.L.	Ordinary School Jan. 1956	Normal class Jan. 1957	58	9	P. (partial)	Initial	10.2	8.8	7.11
						Final	12	12.3	11.10
J.N.	Ordinary School Nov. 1955	Normal class May 1957	58	65	P. (severe partial)	Initial	8.2	7.2	7.3
						Final	10.1	9.10	11.4
C.N.	Ordinary School May, 1957	at George Palmer Unit	31	40	P. (partial)	Initial	7.3	nil	nil
						Final	7.9	7.0	8.7
M.B.	Ordinary School Nov. 1955	at George Palmer Unit	55	63	P. (severe partial)	Initial	8.7	nil	nil
						Final	10.5	8.8	8.2
P.S.	Ordinary School Jan. 1957	Normal class Jan. 1958	28	13	P. (partial)	Initial	6.8	nil	nil
						Final	7.4	8.1	7.11
A.S.	Res. School for partially deaf Jan. 1956	—	63	64	P. (severe)	Initial	9.2	7.2	nil
						Final	10.10	12.0	8.11

N.B.—P. = perceptive deafness
Classification D
Profound—80 d.b. or more
Severe —60 d.b.–80 d.b.
Partial —under 60 d.b.

N.B.—Final results checked by independent Educational Psychologist

TABLE 2

Composite Speech Audiogram



Intensity in decibels ...	20	30	40	50	60	70	80	90	100	110	120
Initial ...	—	1	6	13	26	43	57	66	67	34	
Final ...	2	10	16	26	35	52	71	85	93	90	

.... a = initial scores

——— b = final scores

- - - - - c = normal score for non-deaf children

ACTION at New Town

In the nursery/infant Partially Deaf Unit at New Town School no restriction of youthful activity is imposed by the Loop system, although the teacher retains full contact with the children.

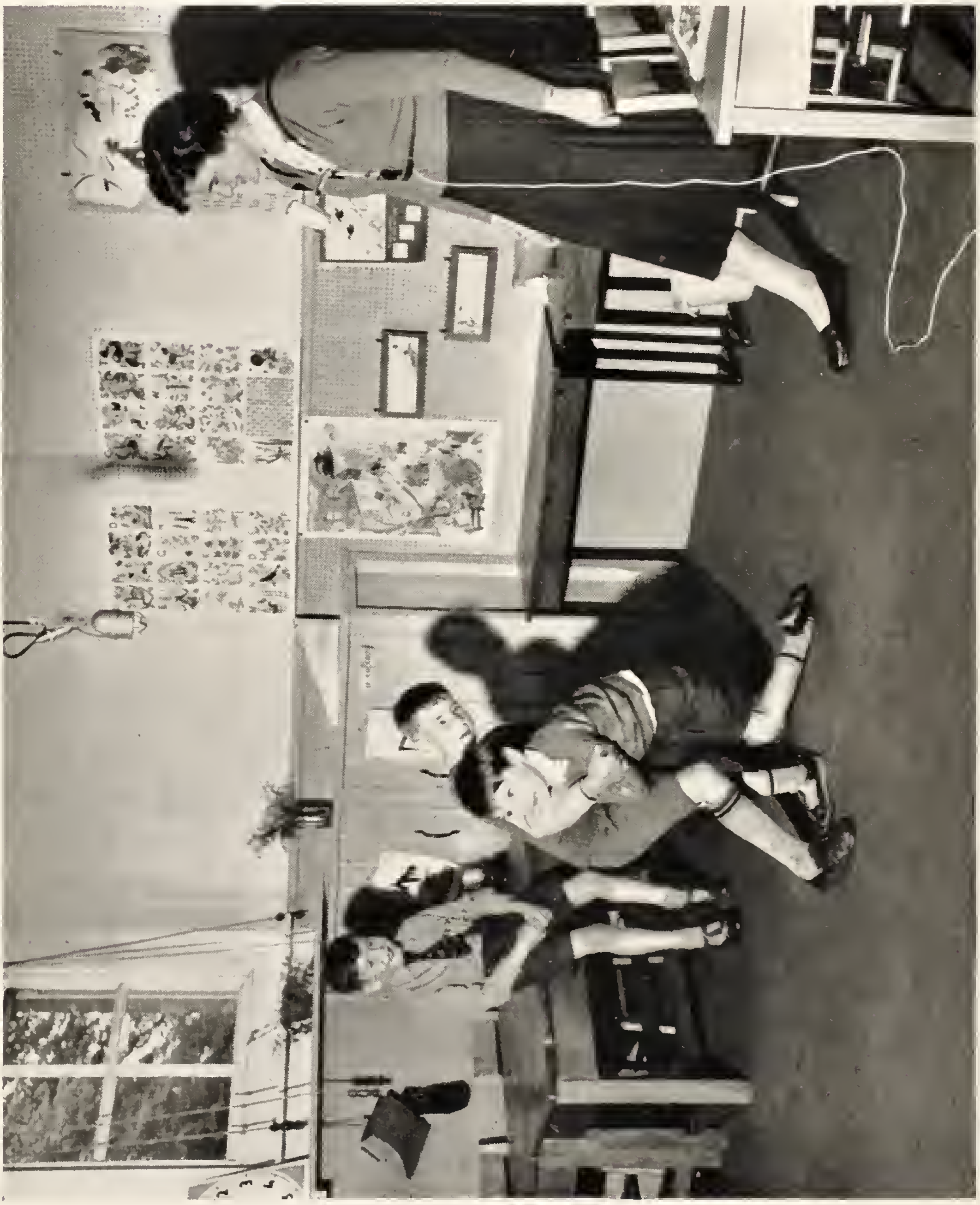


TABLE 3

Pure tone hearing loss of the three children admitted to the New Town Unit in November, 1957

Hearing loss in c.p.s.

Case No.		250	500	1 th.	2 th.	4 th.
1.	L. ear	25 d.b.	45 d.b.	60 d.b.	70 d.b.	75 d.b.
	R. ear	25 d.b.	40 d.b.	55 d.b.	75 d.b.	75 d.b.
2.	L. ear	25 d.b.	20 d.b.	60 d.b.	70 d.b.	60 d.b.
	R. ear	45 d.b.	35 d.b.	55 d.b.	70 d.b.	55 d.b.
3.	L. ear	25 d.b.	40 d.b.	70 d.b.	65 d.b.	50 d.b.
	R. ear	25 d.b.	45 d.b.	65 d.b.	65 d.b.	55 d.b.

Partially Deaf Unit at New Town Infants' School

Once the priority of early diagnosis of deafness had been established, the necessity of providing special educational facilities for children in the younger age group became apparent. It was decided, therefore, to open a second partially deaf unit for children aged 3-7 years at the New Town Infants' School. This school was chosen because it had a nursery class, where the partially deaf children under school age could have the opportunity of taking part in the normal activities suited to their age, and also because a suitable room was available there. George Palmer School was not considered as a venue for this second class as it was felt that a further Unit there would give it an undue weighting of handicap over normality. The room selected at New Town School was accoustically treated and both a loop hearing aid and a locally built composite group hearing aid were installed. This double provision was made because, although the loop is essential for very young children permitting them to move around the classroom, it is not a precision instrument and is monaural. The group hearing aid can be used for periods of twenty minutes or so at a time and when using it the teacher knows the exact intensity for each ear at which the child is hearing and can increase this by very accurate gradations. A tape recorder was also supplied.

It was agreed that the Unit should be an integral part of the Infant's School and educationally should be run on similar lines. The general environment was, in every way, to be similar in nature to the other classes. Provision was therefore made for a nature corner, a library corner, toys, reading and number apparatus, handwork materials, pictures, books, and play materials.

The teacher in charge of the Unit spent six weeks becoming familiar with the aims and methods of the school and particularly with the range of work possible with hearing children. This also afforded opportunity for the teacher to become acquainted with the staff and the children and familiar with the daily routine. It paved the way towards successful integration of the children into the school. Visits were made by the teacher to other primary schools in the town, the partially deaf Unit at George Palmer School, the Royal Berkshire Hospital and the School Health Department. The children who were to join the class were also seen both in their home and school environments.

The class opened on the 18th November with three children. It was planned to increase this number to five children in January, 1958, and eventually to a maximum of eight children. A summary of each case history is given below. The hearing loss in each case is shown separately in Table 3.

Case 1—Male, aged 7.11 years.

Deafness due to brain injury at birth (kernicterus)—slightly athetoid. Deafness was suspected from birth, but not diagnosed until he went to school. A hearing aid was issued at 5 years and he attended a speech therapist. He continued in a backward class at an ordinary school until the Unit opened. On entry to the Unit he had made little progress in reading and number, backwardness being caused by absence due to persistent ill-health and by lack of stamina, and not merely as a result of deafness. Communication was by speech, in which, as already mentioned, he had a moderate defect.

Case 2—Male, aged 7.8 years

This boy, who has a deaf older brother attending ordinary school, is a case of hereditary nerve deafness which was first diagnosed at 5½ years. He has congenital muscular deficiency of shoulder and neck coupled with a history of persistent ill-health. He attended ordinary school and also received speech therapy. On entry to the Unit he was found to have made little progress in reading and number whilst his written language was non-existent. Although he has a slight speech defect, he is fortunate in having a fairly extensive spoken vocabulary.

Case 3—Male, aged 5.10 years.

This boy has a hereditary nerve deafness, the diagnosis being made at 4½ years. As in Case No. 2 there is another instance of deafness in the family ; one of his older sisters having previously attended the partially deaf unit at George Palmer School. This boy attended ordinary school where, being a very bright child, he made a good beginning in reading, writing, and number, in spite of his hearing loss. Speech and language development were below normal for a child of his age.

From the very beginning these children have joined with children of their own age for physical education and activity lessons throughout the day. The utmost co-operation has been afforded by both staff and pupils and is indeed essential for the success of this venture.

At this stage it is not possible to evaluate progress but the children have made noticeable advances in ease of communication, confidence and stability.

Audiometric Survey of 5-year olds

Last year the Annual Report included an account of a survey of those children with defective hearing who attend normal schools. One result of this was to emphasise the importance of detecting and treating such children as early as possible. As an initial step to implement this recommendation a trial audiometric survey was planned. Previous experience had shown that it is not justifiable to use Medical Officers for this type of work, and yet to ensure valid results the employment of a highly skilled enthusiastic worker is essential. To this end Mrs. E. J. Stone, who had previous experience at the Audiology Centre in London, was employed on a part-time basis. She tests the five-year olds in their schools by pure tone audiometry, re-testing suspect cases at the School Clinic. Those who have an initial hearing loss confirmed are then referred to the E.N.T. department at the Royal Berkshire Hospital after a prior educational review by the teacher of the deaf. Her results to date are summarised below :—

No. in 5+ Age Group	No. Examined	Initial failures	Final failures
1039	997	247	100

Result of E.N.T. examination of 100 *final failures*

Require E.N.T. Treatment ...	46
Nil Abnormal	15
Further observation	7
Awaiting reports	32

Although these figures are not complete it is worth comment that no child requiring special educational treatment has been discovered to date. One might note also the high incidence of children requiring removal of tonsils and adenoids for mild conductive deafness, particularly in view of the modern tendency to denigrate this operation.

Ascertainment of deafness in pre-school children.

Analysis of the work to date had shown a recurrent motif accentuating the importance of early ascertainment, so further researches on this point were made by Mr. Ling. These revealed two pertinent facts :—

1. That in the vast majority of cases the parents were the first to become aware of their child's deafness, and,

2. That the age of onset in those wearing hearing aids was under four years in every instance.

Thus the problem was largely to evolve an efficient method of finding these cases in the early stages by way of their parents. Two groups of field workers, health visitors and school attendance officers, were immediately available and since both had the entrée to the homes and wide experience in eliciting information even from the most reluctant, they seemed ideal for the purpose. A further advantage was that the appropriate enquiries could be made during the course of their normal duties and not involve any extra visiting. For their guidance when interviewing the parents a short questionnaire covering the first manifestations of deafness but couched in the simplest language was devised, and this is shown below :—

Question	*Reply*
Major : 1. Is your child talking in sentences ?	....
2. Can you understand everything he says ?	....
Subsidiary : 1. Does he *always* understand what you say to him ?	....
2. Does he always answer when called ?	....
3. Has he a speech defect ?	....
Final : Do you think he has difficulty in hearing ?	....

It is too soon yet to report on the degree of success this enquiry is achieving but first results are definitely encouraging.

(*e*) *Educationally Subnormal.*—During the year 133 children suspected of being educationally subnormal or in serious educational difficulty were examined by the approved Medical Officers. In each case the examination consisted of an intelligence test, at least one performance test, and a physical examination.

The following list gives the results of the assessments of these children :—

New Cases—	*Boys*	*Girls*
Total number of children examined	59	29
E.S.N. children recommended for special school	14	10
E.S.N. children recommended for continuance of ordinary school	32	6
Maladjusted children	—	2
E.S.N. and Maladjusted	4	—
E.S.N. and other significant defects	3	3
Ineducable	1	2
Average intelligence	4	6
For further investigation	11	2

Reviews—		
Total number of children examined	34	11
Recommended for special school	5	3
To continue at special school	12	4
To continue at ordinary school	4	1
Ineducable	2	1
For statutory supervision on leaving school	4	—
School leavers not for statutory supervision	4	2
Other classes	3	—

It is interesting to record that 18 cases were cross laterals of eye and hand and that in each of these instances the educational abilities were well below the mental age. It is sometimes not appreciated how this silent peculiarity can bedevil the schooling of the dull child. By and large the intelligent soon learn to make the necessary adjustments but for the less endowed, cross laterality is a further but unrecognised drag on the quickness of the mind. When diagnosed the teachers concerned should always be told. Such an explanation of what may appear almost deliberate obtuseness will gain the teacher's sympathy and, in the more intractable cases, restores his confidence as well.

When considering those definitely classified as educationally subnormal children, the family background was noteworthy in 25 instances. Although only 7 children came from homes where neglect and squalor were on a classical scale, the others showed varying degrees of inadequacy and in 11 cases, one of the parents was known to be of low intelligence.

(*f*) *Epileptic.*—The School Health Service has under observation 30 pupils who suffer from either grand mal or petit mal forms of epilepsy. Two of these children are resident at Chalfont Colony, six attend the Avenue School, and the remainder are educated in ordinary schools. Those attending ordinary schools are either cases of petit mal or else grand mal of infrequent ocurrence. Severer cases attend the Avenue Special School where careful supervision and adherence to regimen curtail the frequency and severity of the seizures. Special care is taken to see that the child remains alert and interested as intellectual preoccupation is a well-known factor in the prevention of epileptic attacks.

Since it is important that these children should remain in a normal environment and not grow up feeling that they are a race apart, the attitude of the teaching profession in Reading in their acceptance of the epileptic child is both generous and far-seeing.

(*g*) *Maladjusted.*— Last year reference was made to the peculiar difficulties presented by the more disturbed type of maladjusted child and the frequency in which parental rejection was the causative factor. The following vignette may well serve to demonstrate the appalling circumstances with which such children have to contend.

> A pleasant well formed boy of ten years was brought by his mother to the School Clinic. She informed the doctor that her son, although of average intelligence, was doing badly at school. Furthermore, he had developed dirty habits at home, throwing his food about or hiding it in cupboards, and worse still, excreting in the most unsuitable and unexpected places.
>
> It transpired that the boy had been raised in another part of England by foster parents who treated him as their own son. He lived a rather bizarre but not unpleasant life, as his foster parents were decidedly unconventional. However he was happy, well treated, and lived in the country. Later the foster parents quarrelled and used him as a convenient weapon in the usual affrays of a broken marriage. Eventually they divorced and took unto themselves other spouses, charitably informing the lad in the meantime that he was not their son as he has always believed. Eventually his real mother, a decent rather limited woman, hearing that he was unhappy and his conduct deteriorating, and anxious to atone for her past neglect, brought him back to her small terrace house. Apart from the circumstances mentioned above, his behaviour there has been exemplary. The boy is polite, courteous, but shows no sign of love or affection although he would like to be able to do so. He told this story to the doctor concerned with complete passivity and objection, speaking of all concerned with the detachment of a historian discussing those long dead. He is now showing some progress at school but has no friends and makes no real contact with either the staff or children there. No knowledge of psychiatry is needed to recognise in this tragic isolation an augury of adult disquietude.

The report of Dr. M. E. Ward, Psychiatrist, Reading Child Guidance Clinic, reads :—

The Reading Child Guidance Clinic separated from the Joint Berkshire Child Guidance Clinic on 1st April, 1957. The Clinic retains the Joint Clinic premises owned by the Reading Borough at 27 Kidmore Road, Caversham, Reading.

The Reading Child Guidance Clinic Staff are :—

Psychiatrists :—	Dr. G. O'Gorman	Consultant	1 session weekly
	Dr. M. E. Ward		4 sessions weekly
	Dr. S. Pittock		1 session weekly
Psychologists :—	Mrs. Scott Blair	Part-time	8 sessions weekly
Psychiatric Social Worker ;—	Post vacant		
		Mrs. Crossman was appointed Social Worker from 6th May to 31st August, 1957	
Secretary :—	Miss Arthur	Full-time	
Assistant Secretary :—	Mrs. Alford	Part-time	

The clinic premises are open all the week. The clinic provides a comprehensive service for all children up to 18, those children not attending a Local Authority School are referred by the family doctor and seen as National Health Service patients. Most of the referrals are medical referrals through the School Medical Officers, family doctors or the Children's Psychiatric Clinic at the Royal Berkshire Hospital.

The work of the clinic has been severely handicapped by the lack of a Psychiatric Social Worker. Mrs. Cazes, Psychiatric Social Worker, kindly gave us six sessions weekly from the end of January to March, and continued to advise and help Mrs. Crossman, who gave us valuable assistance during her period with us. The post of Psychiatric Social Worker has been advertised but no appointment has yet been made.

The Psychologist, Mrs. Scott Blair, does approximately four sessions in the clinic. The rest of her time is occupied in building up the School Psychological Service in co-operation with the School Medical Officers and teachers. Her work, too, has been handicapped by the lack of a Psychiatric Social Worker ; in many cases Mrs. Scott Blair having to undertake the social work herself.

Reading Borough Children seen at Joint Clinic from 1st January, 1957 to 31st December, 1957

No. of cases brought forward from previous year	167
No. of new cases referred	12
No. of cases reopened during the period	2
Total No. of cases seen for Consultation and Treatment	61
Total No. of cases treated	19

No. of cases closed	50
After consultation and Advice only	0

No. of cases treated and closed :—

Adjusted	3
Improved	5
No change	3
Closed after Advice and Supervision	29
Prematurely Closed	8
No. of cases closed—not seen	2
No. of cases closed after Social Work only	0

No. of interviews :—

For Psychiatric Examination	16
For Intelligence Test	33
For Treatment, including remedial coaching	122

No. of P.S.W. Interviews	81

All Children seen at Reading Borough Clinic, from 1st April, 1957 to 31st December, 1957

No of cases brought forward from 31st March, 1957	165
No. of New Cases referred	67
No. of cases reopened during the period	5
Total No. of cases seen for Consultation and Treatment	164
Total No. of cases treated	47

No. of cases closed	97
After Consultation and Advice only	25

No. of cases treated and closed :—

Adjusted	3
Improved	15
No change	3
Closed after Advice and Supervision	33
Prematurely closed	8
No. of cases closed—not seen	8
No. of cases closed after Social Work only	2

No. of Interviews :—

For Psychiatric Examination	51
For Intelligence Test	60
For Treatment, including remedial coaching	426

No. of P.S.W. interviews	127

1st January, 1957, to 31st December, 1957

No. of children admitted to Hostels for Maladjusted Children	5
No. of children discharged from Hostels for Maladjusted Children	7
No. of children in Hostels on 31st December, 1957	8

Sources of Referral, Child Guidance Clinic Cases

	1/1/57 – 31/3/57	1/4/57 – 31/12/57
School Medical Officers	6	22
Chief Education Officers	1	4
General Practitioners	3	14
Magistrates	1	2
Probation Officers	1	3
Children's Officers	–	7
Hospitals and other Psychiatric Clinics	–	8
Teachers	–	4
Parents and Relatives	–	2
Others	–	1
	12	67

(*h*) *Physically Handicapped.*—This year seven children are receiving education at a residential school, the remainder of the physically handicapped attend normal schools, the appropriate department of the Avenue School, the class for spastic children at the Battle Hospital, or else receive home teaching.

Dr. Brian Smith reports :—

The number of children in the physically handicapped department of the Avenue School continues to fall slowly, and it remains our policy to keep the handicapped child in an ordinary school where practicable. One cannot but be impressed by the way in which the schools accept the handicapped pupil who in former years would have received education in a special school.

In spite of the poliomyelitis suffered by Reading this year, we have fortunately not had to admit any new pupils suffering from its effects. We have however several earlier cases still at the school.

The school continues to educate and care for a number of children suffering from congenital heart defects, but this year has seen remarkable progress in the surgery of the heart. We have now arrived at the stage where, although at present a heart condition may not be treated by surgery, if we can maintain the health of a child for a further year or two, he may well become a candidate for a curative operation. As each term goes by the chance of a cure for most of these children is increased.

Medical supervision of the physically handicapped is greatly facilitated by close co-operation with the Pædiatrician at the Royal Berkshire Hospital. We now have regular meetings with Dr. Kempton and his department where points arising on care and education of individual children can be discussed freely.

Special Class for Cerebral Palsy.—The special class at the Battle Hospital was discontinued in June, 1957, pending the opening of new premises at the Avenue School in January, 1958. During the intervening period the children concerned were reassessed from the medical and educational aspects to determine their suitability for entrance to the new unit, those ascertained as educable being given home teaching.

Since 1956 it has been possible for us to maintain an even closer contact with children afflicted with this handicap as Mr. Squire, the Consultant Orthopædic Surgeon, has kindly invited one of the School Medical Officers to attend his Spastic Clinic at the Battle Hospital. By this we become acquainted with pre-school cases at the earliest possible moment and can assess their educational needs well in advance. This is reflected in the large number of spastics diagnosed in the pre-school group.

CLASSIFICATION OF CEREBRAL PALSY CASES

(1) According to Educational Potentialities	*Boys*	*Girls*
(*a*) Pre-School	3	8
(*b*) Ordinary School	9	2
(*c*) Avenue Special School	8	3
(*d*) Battle Special Class	2	3
(*e*) Residential Schools	–	–
(*f*) Formally ascertained as Mentally Defective	1	3

(2) According to Age	*Boys*	*Girls*
Under 5 Yrs.	3	8
5-10 yrs.	11	5
10-16 yrs.	9	4

(*i*) *Delicate Department.*—Dr. Ursula Anderson reports :—

Although the number of children who require the more sheltered environment of the delicate department of the Avenue School is steadily decreasing, it will no doubt always be necessary to provide such an amenity to, we hope, an ever lessening degree.

This past year has proved a most satisfying one. Three children have been judged fit to return to ordinary school and two more are due to leave in July.

There was one interesting child whose case illustrates forcibly the close liaison that exists between the hospital service and the School Medical Service. This child suffers from myxoedema and his treatment was supervised at the school. The success of the treatment is such that he is now fit to return to ordinary school. It is most rewarding for those who daily supervise these children to see such a dramatic recovery.

(*j*) *Speech Defects.*—Mrs. Elsbury reports :—

227 children, 57 girls and 170 boys attended for treatment
2,990 attendances were made
66 discharged cured or greatly improved
2 discharged showing no improvement
6 left the district before treatment was completed
4 left school before treatment was completed
7 taken off the register for non-attendance
2 refused treatment
140 continued into 1958
133 cases of dyslalia
5 cases of dyslalia due to deafness
6 cases of retarded speech development
46 cases of stammering
8 cases of stammering plus dyslalia
9 cases of cerebral palsy
7 cases of cleft palate
2 cases of dysarthria
8 cases of disordered vocal resonance
1 case of congenital auditory imperception

In cases where it was necessary, children were referred for hearing and intelligence tests and orthodontic treatment. Time was set aside for school and home visits and interviewing parents.

Clinics were held at Queen's Road, Whitley and Caversham Clinics and the Avenue, the Hill, Emmer Green, Grovelands, Geoffrey Field, Battle, Battle Hospital, Southcote, St. Michael's, E. P. Collier, and Ashmead Schools. The Deaf Unit at George Palmer School was attended for the purpose of assisting with the survey of children with defective hearing.

Speech Therapy for the educationally subnormal child. As may be expected, the number of children in a Special School who require speech therapy, far exceeds that of children in need of treatment in an ordinary primary school. The majority of my patients at the Avenue School are to be found in the educationally subnormal department. There is a very high incidence of speech defects among subnormal children, in fact, although I have not made a detailed investigation, I should be prepared to state that approximately 30% of the children in this particular department of the Avenue School have speech irregularities. The most common defect to be found is dyslalia, occurring in various degrees of severity. Unfortunately because of the limited time at my disposal, it is impossible to give treatment to every child in need of help and therefore I concentrate on the more severe cases.

Many people are of the opinion that speech therapy with the subnormal child is a waste of time and effort, but I hope to be able to prove otherwise. I admit that the prognosis in such cases is not favourable as it is with children of normal intelligence and, consequently, one does not expect spectacular results but, in spite of this, I do feel that it is essential to give treatment whenever possible. I feel sure that most people have encountered someone similar to the young man of my acquaintance who is unable to read or write, but who can still run a very successful scrap metal business, as well as being the owner of several very large cars. This, of course, is an extreme example of one who is illiterate yet astute, but the fact remains that many children classed as educationally subnormal, leave school capable of supporting themselves, maintaining families, and playing a normal part in the adult community in which they find themselves. Therefore, however low their I.Q. (these children are not classified as ineducable) and however poor the prognosis, I feel that something should be done for those with speech defects to bring their speech nearer to the standard of that which is considered to be normal in their particular environment.

By far the most satisfactory method of treating educationally subnormal children is to see them in school, where they are used to their surroundings. Children of low intelligence are frequently disturbed and excited by travelling to a clinic, and to take them on weekly visits to a strange environment often results in exciting them to such an extent that it is impossible to work with them at all. Also, young children of this genre are usually incapable of travelling alone and so to arrange visits to a clinic often presents difficulties. Within the school environment, however, these difficulties do not arise, and the child, with the security of familiarity, can settle down to use his limited powers of concentration to their full extent. Another point in favour of treatment in school is the fact that the speech therapist has direct contact with the teaching staff, and since constant practice and reminding are essential to the treatment of an educationally subnormal dyslalic, the co-operation of the teacher is most important. Very often these children have little help at home, for it is frequently found that their parents also have limited intelligence.

The most satisfactory age for commencing speech therapy is around seven years, as it seems that educationally subnormal children have a maturation point for speech which falls between the seventh and eighth years, irrespective of the I.Q. I have found very little response under this age.

The treatment of the dyslalic in a special school differs in practice, although not in principle, from the dyslalic with normal intelligence. Whereas the normal child often needs the encouragement of pictures on the clinic walls and an abundance of toys and books in order to help him to feel relaxed and " at home," the same equipment acts as a positive hindrance to the educationally subnormal patient. As those who have dealt with them will know only too well, educationally subnormal children are easily stimulated and excited—their attention flits from one toy to the other or from one picture to the next and concentration is very difficult for them. Because of this, it is advisable to limit the amount of visible equipment and also to keep the method of treatment as direct as possible. The use of play with these children has little effect, as they are easily confused and are unable to remember speech work if it is associated with play. Also their span of attention is very limited and they are unable to concentrate for longer than five or ten minutes at a time. It is far more beneficial to the children, therefore, to use this limited time for direct speech work.

Although I have emphasised the importance of concentrating on work directly concerned with the correction of speech sounds and of limiting the amount of equipment used, this does not mean that the children find their treatment tedious or boring in any way. The educationally subnormal dyslalic finds any achievement, however small, to be extremely stimulating and encouraging. So often he is wary about making an effort in case he experiences yet another failure and therefore it is most important to give him an incentive to use his limited powers of determination and concentration by praising his smallest achievement. Any work on speech correction has of necessity to be presented in very gradual stages in order that the patient may achieve one success at one treatment. It is a mistake to pass on to a further step during the same session as so often the child is confused by this and has forgotten everything he may have learned by the time the next treatment comes round. The fact that he owns a speech book is also an incentive to the less intelligent child. Only the very simplest of drawings are needed as the educationally subnormal child does not appreciate detail and seems to gain a general impression from the roughest sketch. Firstly, the speech book gives the child the impression that his treatment is interesting and enjoyable ; secondly, he gains prestige amongst the other members of his class (I have often heard children say " Oo I wish I had a book like that " or " Let's see your book, Tommy") and thirdly, the child has a record of the work he has done on particular sounds and the achievements he has made.

Speech therapy with educationaly subnormal dyslalics does not achieve a high percentage of complete or startling recoveries and can be a very long and exacting task, especially for the therapist. It is not, however, in my opinion, a waste of time. Very rarely is it found that a child makes no improvement whatsoever, and in the majority of cases the progress is quite considerable. As I mentioned at the beginning of this report, most of these children when they leave school will be expected to play a normal part in their particular environment, and therefore I feel that any help the speech therapist can give to facilitate the adaptation to this environment is not only useful but essential.

The Avenue Special School

Mı. G. Ross, M.A., Headmaster, reports :—

The building of a new extension to the school was started in the spring. It is pleasant to watch the plans and words taking permanent shape in brick and concrete. Children and staff look forward to the advantages of increased space and improved facilities.

In the last year of the old organisation, there were few changes in the rolls of the departments. A further diminution occurred in the number of children in the physically handicapped senior form. Only one boy was admitted during the year. Of those who left, one boy went to residential school and another boy was selected for vocational training which is continuing towards his completion of the examinations of the Horological Society. It is perhaps reasonable to linger on the considerations which preceded this boy's acceptance for training. He suffered from severe congenital malformation and his frequent illnesses and many operations affected not only his health but also his mother's. The anxieties of overcoming the boy's own problems were so mitigated by his teachers that he faced the decision of training and employment with reasonable equanimity, but without much enthusiasm. Preliminary discussions with the Youth Employment Officer, after comprehensive medical examinations, led to his selection of watch-making and repairing as a career, but before making a final decision every aspect was again discussed with this officer and with the Rehabilitation Officer and with his parents. He was provided with opportunities to visit the Ministry of Labour training centres and a prominent watch-maker and jeweller in Reading readily gave him facilities to observe and study in his workshop. The boy's decision was finally made with assurance and his training now approaches successful conclusion. His mother's health has benefited from his success.

Two more boys left for employment, one was placed after great difficulty because of the severity of his handicap. The other, who returned to us after rejection from boarding school, has not yet found employment to his liking or what is unfortunately most probable, he has not yet adjusted himself to employment at all. He is one of those few who cannot meet the responsibilities of that first job, whatever it may be, and lacking strength of character or purpose, tend to drift from one employment to another and perhaps eventually to no employment at all. Boys and girls of this type involve the Youth Employment Officer in a great expenditure of unrewarded time and effort.

Two younger boys returned to ordinary school. Two girls were away from part of the year in hospital. There remained thirty-two children in the department in December, a reduction of four from a year ago—twenty of junior school age and twelve of senior school age.

The roll of the Delicate Department was diminished by three during the year to thirty-four. Two girls and one boy were transferred to secondary schools and two boys and one girl left for appropriate settled employment. A boy and a girl were transferred to the subnormal department of the school. Five boys and one girl were admitted during the year. As in the physically handicapped department, the junior class had a larger roll than the senior. In this latter class too, many of the boys continue to struggle to overcome specific educational disability or emotional defect, and the additional accommodation of the extension, when ready, will make possible a more appropriate organisation.

The roll of the Educationally Sub-Normal department continued at its maximum but with many changes. Fourteen children, eleven boys and three girls were admitted during the year. Eight boys left to begin work and jobs were found for all of them although two gave evidence of instability of a markedly different kind. One lad, who during his short time in the school had shown rather pathetic social inadequacy, has proven himself incapable of maintaining even the poor standard of school behaviour. The second boy has drifted from job to job rather because of his own misdirected enthusiasms than of incapability. The other boys have settled very well. One lad left the district with his family and another went to a residential school.

The three girls who attained to the age of 16 years found suitable employment and have settled pleasantly. A fourth girl left for occupational training.

Increasing interest has been shown recently in the classification of handicapped pupils. Perhaps therefore in grouping the children under the three headings of the departments—a grouping governed by the child's major handicap—there is obscured the subsidiary handicap or minor defect which frequently has a direct bearing on the approach to the child's rehabilitation.

Emotional maladjustment is recognised to be a most elusive, even frustrating, concomitant of a child's handicap, calling for much experiment in the educational treatment and social training of the child apart from such generalities as ready acceptance by all the staff, development of confidence and self discipline and the creation of individual happiness within a tolerant and free atmosphere. But there are more easily defined and perhaps lesser recognised factors in the child's construction. In the E.S.N. Department for example the number of children who fell into the following headings is significant. :—

Specific Physical Defect	Delicate under-nourished	Postural Defects	Maladjusted	Speech Defect	Corrected Eye Defect
11	18	10	8	9	6

This may perhaps emphasise the appropriateness of the observations in the report of two years ago—" it is not generally known, except to those intimately associated with these children, how greatly the resources of a Local Education Authority are applied to solve their problems, so that nurses, teachers, welfare workers, and administrative staff contribute to the solution that the family and school doctors produce."

The year's work in the school garden produced most satisfying results. The small gardens of the senior boys were almost uniformly excellent and the combined work of the groups resulted in the best display of flowers for some years. Many of the flowers and a selection of the vegetables and fruit supplemented by the children's harvest festival offerings made gifts for the old people's homes.

The autumn of 1957 saw the introduction of light metal work into the craft scheme. This has been a considerable incentive to the boys in their last year of school. One boy in the physically and mentally handicapped group has made considerable progress, his finished articles being of a high standard. Early models consisted of gardening tools, rakes, trowels, scrapers, wood and metal weed extractors, and in the domestic field, metal hat and coat fixtures ornamented with coloured balls. Soldering is involved in making trowels (brick laying), wallpaper and paint scrapers. The exercises assist mentally and physically in giving the boys intense satisfaction and pride in accomplishment.

The metal work scheme is in addition to the woodwork, leathercraft, and lamp shade making. Stools, medicine cupboards, book ends, small boats and wooden novelties suitable for Christmas presents are made, while lamp shades are designed and fitted to table lamps turned on the lathe. It is interesting to note that the whole article consisting of wood, metal, and other materials is completed by the boys.

The addition to the staff of a domestic science teacher made possible the development of the dressmaking scheme while awaiting the completion of the domestic science premises. The senior girls from all departments participated and their combined effort in producing the uniform for the Christmas festival of carols and readings was most gratifying.

This service established itself among the corporate events of the year and with the party on the following day, for which we are grateful to His Worship the Mayor and our Managers, carried the dual message of Christmas to every child. We are also indebted to the Mayor for making Prize Day so memorable.

There was the day's outing to Hayling Island in ideal weather and last July a first attempt was made to hold a school swimming gala and field sports. Both were very happy occasions. In connection with swimming, it is most gratifying to report that thirty-eight certificates were awarded for varying degrees of competency to the forty odd children from all departments which constitutes the classes.

Home Teaching. The centre for spastic children at Battle Hospital was closed in July in anticipation of the completion of the new premises by September. For the duration of the delay, the three children received home teaching. Otherwise the number of children being taught at home diminished during the year. Two boys were admitted to residential school, one boy and one girl left for after-care treatment. Another girl after home teaching and part time attendance at Secondary School was admitted to the full time commercial course of the Reading Technical College. After many years in hospital a girl was happily accepted at a residential school at the end of the year. Four girls and three boys received appropriate teaching at home or in hospital for some part of the year before resuming full time education in school. In December five children were being taught at home, although throughout the year sixteen children benefited from the visits of the teachers. Teaching has been given in almost all subjects, from the infant school to G.C.E. level, with an encouraging response from the young folk involved.

Home Teaching Cases.—To ensure a true understanding of the work of the home teacher, a brief history of the children receiving home teaching might be apposite.

(1)—A boy of 8 years with a left-sided hemiparesis due to an unspecified encephalopathy. His physical condition has remained stationary and educationally he has made little progress. Home teaching in the morning and attendance at the physically handicapped department at the Avenue School in the afternoon has done much to improve his morale.

(2)—A girl of 13 years of an extreme obesity. She is quite normal mentally and maintains satisfactory educational progress.

(3)—An epileptic boy of 8 years who also has a low I.Q. While waiting admission to the E.S.N. department of the Avenue School he had frequent home teaching which did much to improve his social and emotional behaviour.

(4)—A 14-year-old girl suffering from a juvenile psychosis mainly evinced in a refusal to attend school or even to meet individual strangers. Her condition deteriorated to such an extent that in the end she would not have anything to do with her home teacher who was obliged to suspend lessons.

(5)—A girl of 14 years with fragilitas osseum who has been confined to a frame in a hospital ward for some years. The provision of a spinal carriage last year gave her, not only increased mobility, but greater confidence and a vision of new horizons. The home teacher visits her in hospital and her improvement is such that transfer to a residential school for the physically handicapped is anticipated in the coming year.

(6)—A girl of 7 years with a bilateral congenital disease of the hips necessitating a double operation. During her long stay in hospital she was sustained by home teaching.

(7)—A boy of 11 years who remained at home for several months due to post-paralytic weakness of his back and leg muscles. Home teaching ensured that on his return to school his position in the class was unchanged.

(8)—A boy of 9 years suffering from severe asthma who had been in hospital for a considerable part of the previous year. He received home teaching for some months prior to his leaving the district.

As mentioned in another section of this report, three spastic children were placed on home teaching during the period between the closing of the Battle Hospital Unit and the opening of the new premises at the Avenue School.

SCHOOL DENTAL SERVICE

Mr. J. Campbell, L.D.S., reports as follows :—

The past year has been rather a difficult one as far as the Dental Service is concerned, the staffing position having become worse. The year commenced with only one Dental Officer, namely myself, and the other Dental Officer did not return to duty until 11th March, after twenty-one weeks maternity leave. On June 15th her full time duties terminated and she commenced part-time duties of four sessions per week. This ended on 31st October when she left the service on leaving Reading. With the deduction of the holidays, it meant our staffing position was reduced to less than 1½ officers over the year. This meant less routine inspection than one would desire and a tendency to increase the number of casuals. Up to the present moment however, this has not been the case as far as casuals are concerned.

The following tables give details of the work performed during the year :—

Dental Inspection and Treatment Carried Out by the Authority

(1)	Number of pupils inspected by the Authority's Dental Officers :—		
	(*a*) At Periodic Inspections	5,250	
	(*b*) As Specials	1,335	
	Total (1)		6,585
(2)	Number found to require treatment		4,450
(3)	Number offered treatment		3,960
(4)	Number actually treated		3,024
(5)	Number of attendences made by pupils for treatment ...		5,649
(6)	Half-days devoted to : Periodic Inspection	28	
	Treatment	576	
	Total (6) ...		604
(7)	Fillings : Permanent Teeth	3,459	
	Temporary Teeth	411	
	Total (7)		3,870

(8)	Number of teeth filled : Permanent Teeth	2,688	
	Temporary Teeth	399	
	Total (8)		3,087
(9)	Extractions : Permanent Teeth	688	
	Temporary Teeth	2,251	
	Total (9)		2,939
(10)	Administration of general anaesthetics		786
(11)	Orthodontics : (a) Cases commenced during year		32
	(*b*) Cases carried forward from previous year		51
	(*c*) Cases completed during year		19
	(*d*) Cases discontinued during year ...		13
	(*e*) Pupils treated with appliances		32
	(*f*) Removable appliances fitted		22
	(*g*) Fixed appliances fitted		10
	(*h*) Total attendances		465
(12)	Number of pupils supplied with artificial dentures		27
(13)	Other operations : Permanent Teeth ...	599	
	Temporary teeth	1,735	
	Total (13)		2,334

The following table gives details of the treatment given to children attending non-council schools, but who have scholarships from the Local Authority. It also includes patients from the Occupation Centre :—

Schools	No. Treated	No. Attendances	No. Extractions	No. Fillings	No. Anaesthetics	No. Discharged
Abbey	2	8	–	4	–	2
St. Joseph's ...	3	5	–	4	–	3
Christ's Hospital ...	2	11	2	1	1	1
Presentation College	2	3	–	1	–	1
Occupation Centre	14	50	39	9	14	11

One full denture was supplied to a patient from the Occupation Centre

Dentures. The number of dentures supplied amounted to 27, five fewer than in 1956. The number of repairs to existing dentures was 9. These dentures were all absolutely necessary, in some cases the teeth having been severely damaged or knocked out by accident, but in too many cases, had to be extracted owing to neglect and delay in attending for treatment.

Orthodontics. This section is one which must be controlled rigidly otherwise, owing to the continuous demands and time consuming type of work, conservative work would suffer considerably. Only selected cases can be undertaken at present. Thirty-two appliances have been fitted during the year. Repairs and additions to appliances numbered 30.

The results, on the whole, are very gratifying. The number of cases under treatment total 80 at the moment. Cases discharged were 19, all with satisfactory results, nearly double the previous year's total. Thirteen cases were discontinued as lack of co-operation on the part of child and parent made the work a complete waste of time.

Oral Hygiene. With the reduced staff there has been a slight decrease in the number of children referred to this section, but I still consider that it is a very essential part of the School Dental Service. With the advent of more staff, the results would show a marked benefit. One thousand, five hundred and sixty-seven children made 1,602 attendances. This figure is composed of 1,100 children who also had other dental treatment and were referred for clean and polish by me. The remaining 467 were found at inspection to require clean and polish only.

The Hygienist made a number of visits to schools and gave talks and demonstrations on Oral Hygiene to the pupils.

Ten cases attended from the Occupation Centre and five from St. Joseph's, the Abbey School and Presentation College.

PREVENTION AND TREATMENT

1. **B.C.G. Vaccination.** As stated in last year's report most of those children who would normally have been vaccinated in 1957 received B.C.G. vaccination in 1956 as a complementary measure to the Tuberculosis Survey. However, in the Michaelmas term it was possible to extend this procedure to some of the children born in 1944. The results were as follows :—

No. Selected	Acceptances	%	Absent	Mantoux Tested	Pos.	Neg.	Abs.	%	Received B.C.G.
916	598	65.3	41	557	64	470	23	13.6	467

2. **Investigation of Tuberculosis contacts.** Twice during the year it was necessary to investigate contacts of tuberculosis cases occurring in Reading Schools. Two maintained schools were involved and in each instance only one case of pulmonary tuberculosis was notified. A Mantoux test was offered to each contact and the positive cases referred for investigation. The number of children at risk was 52 and of these 38 were Mantoux tested. Two children had a positive result but further investigation showed no evidence of disease.

Worthy of mention is the fact that three parents refused to allow their children to be tested while a further ten did not even bother to reply to the letter of request.

3. **Mantoux testing in individual cases.** The Mantoux test was used quite extensively during the year as a useful adjunct in the examination of individual children whose symptoms of illness or domestic history might indicate a possibility of tuberculosis.

4. **Ultra-Violet Light Therapy.** This was available during the year at the Queen's Road Clinic, Whitley Clinic, and the Avenue School. Sunlight treatment is always very popular with the children and since it is rarely that good fun and good advice coincide, they derive maximum benefit from these sessions.

20 boys }
18 girls } received an average of 40 minutes each.
2 pre-school children }
270 separate attendances were made.
Children treated were in the 3-10 years age group.

(5) **Ringworm Clinic.** Six new cases of Ringworm of the Scalp were diagnosed in 1957 compared with an incidence of ten new cases in the previous year. A domestic animal was believed to be the source of infection in each instance.

RINGWORM OF THE SCALP

	Total	School Age	Pre-School Age	Boys	Girls
Number of Cases treated	6	4	2	3	1
No. of Cases referred to Royal Berks Hospital	—	—	—	—	—
No. given X-ray Treatment	—	—	—	—	—
No. of Contacts examined	43	42	1	23	19

Average absence from school was one month

(6) **Remedial Exercises.** One hundred and forty children were advised to do remedial exercises for skeletal defects during the year. The number of children in each category is listed below :—

Flat Feet	45
Postural Exercises	71
Breathing Exercises	16
Postural and Breathing Exercises	8

A further 156 children who had poor chest expansion, breathing defects, or asthma, were recommended for breathing exercises. The breathing exercises advised were deliberately chosen for their simplicity, for to younger children they can be presented as an amusement rather than a penance. As a means of re-educating children in the correct usage of respiratory muscles and passages and in the development of the lung potential, these exercises are of the foremost assistance and act as a positive reinforcement of bodily health. Illustrated leaflets demonstrating the exercises appropriate to the defect were given to each child in the above categories.

(7) **Minor Ailment Clinics.** One thousand one hundred and ninety-eight children received treatment for minor ailments. The main complaints were skin diseases, suspected fractures, bruises and eye conditions.

HEALTH EDUCATION

During the year the School Medical Officers gave to parent-teacher and other interested associations a number of talks and lectures on subjects concerning the health of the school child. The school nurses also carried out an extensive programme within the schools themselves.

Miss M. Webber, Superindentent Health Visitor/School Nurse reports :—

Selected School Nurses/Health Visitors have continued the experiment commenced during 1956 of giving a number of talks to the Secondary Modern School girls on " Homecraft." We have tried to avoid using the term " Parentcraft " as it is obvious that this age group are not yet ready for talks at that level. These talks are closely linked with the syllabus of their Housecraft course. We are very much indebted to Miss Mason, Housecraft Organiser, and to the Head Teachers, Domestic Science and Housecraft staff in all the schools we have attended for their help and guidance.

It is obvious to us that the pupils have enjoyed these talks and it has been interesting to see the reaction of these girls at their visit to an Infant Welfare Clinic and a Nursery School.

At the end of the year 108 talks had been given covering 9 Secondary Modern Schools.

Central Council of Health Education. In June the Central Council of Health Education gave a two-day study course entitled " The Teaching of Parentcraft in Schools," which was very well attended. This proved extremely interesting and informative. From these two days we were able to assess the value of the syllabus we had been giving, and the changes we needed to make in our whole outlook in what a young girl needed in our talks. This included the heading of " Parentcraft " to " Homecraft." The course was certainly made more satisfying by the fact that on the last afternoon we were supplied with a group of girls to act as " guinea pigs " for a demonstration talk. The considerable help and guidance we received from this course has, we believe, given us the opportunity to draw up a syllabus most suitable for this difficult age group, but we still consider that the close co-operation we have with the teachers is one which we hope to foster more and more.

PHYSICAL EDUCATION

The organisers of Physical Education report :—

We are fortunate in Reading to have the enthusiastic support of the Head Teachers for physical education and their appreciation of its essential place in the curriculum of the schools. This interest is shown in their willingness to encourage the introduction of new ideas and methods by the specialist teachers of the subject. In this atmosphere these teachers are aided in their work in the knowledge that their efforts are recognised. Some Head Teachers have availed themselves of the opportunities provided by the new Burnham awards to show their appreciation of the responsibilities accepted by their specialist teachers of physical education by granting them positions of authority in the schools. We value the Committee's endorsement of these actions.

The shortage of women teachers is little changed although there is consolation in the knowledge that appointments have been made for Westwood. Where facilities are good there would seem to be no problem. We are grateful to the Committee for granting leave of absence to one woman teacher for one year to undergo a course of specialist training at Liverpool. The man teacher now attending a similar course will be resuming his duties at the Grove School at the beginning of the Autumn Term and no doubt this additional training will reflect favourably on the work there in the future.

In general, indoor facilities for our work are improving in the older schools where the reduction in the number of pupils permits more frequent use to be made of the school halls. The position is reversed in some of the newer schools where overcrowding requires the indoor teaching spaces for physical training to be used as classrooms. It is fortunate that in these schools there are outdoor provisions for the subject. Maximum use is made of playground spaces and playing field areas.

Progress has been made in our programme to install fixed apparatus in primary departments and during the year the following have been supplied :— Katesgrove Infants, Park Lane Primary, Whitley Park Infants.

Plans are ahead to place similar apparatus in Alfred Sutton Primary and St. Anne's R.C. School.

Games. We have already mentioned the greater use of outdoor facilities in the newer schools with the result that the playing of games and the practising of skills are important subjects in the programme of physical education for junior children. Progress is satisfactory as may be seen in the improved standard of play in inter-school matches. In the secondary schools, the major developments have been in hockey for the girls and in rugby for the boys. It has been necessary to plan ahead to increase the number of hockey pitches on school playing fields and to call upon the Parks Committee for additional use of Cintra for the girls. Due to the interest shown in schools for rugby football during the past few years there is now a greater demand for pitches. A new section has been formed as a senior branch of the Youth Rugby Club which will in future field four teams each week on pitches provided on the public parks. The other major games are not neglected. All are encouraged in the schools and continue to be played side by side in harmony. In many schools it is now possible to offer a choice of game to the older pupil in an attempt to create individual interest and improve personal skill. It is pleasing to report that clothing and footwear for games are more widely provided by parents. Where washing facilities are available, showering after games is being encouraged as an essential part of the lesson.

Playing Fields. The playing field for Palmer Junior School was taken over from the contractors during the Summer Term and it is anticipated that limited play will be possible there early in the Autumn. This field, together with the proposed ground for Katesgrove Junior School, will in some small way meet the demand for extra pitches when the new girls' school takes over the George Palmer Playing Field in Northumberland Avenue. Consideration might be given to acquiring a larger acreage on the site now being prepared in Elgar Road to meet the future needs of Christchurch, St. John's, Katesgrove Secondary and the school to be formed in the present Palmer building when the girls vacate it. Tennis courts for the Grove School have been agreed on a site that will not interfere with the present playing areas. It may be necessary to consider some form of shelter for clothes here if these courts are to be made available after school hours and at week-ends. It would be helpful if the hard tennis courts planned for the new girls' school in Whitley could be prepared as soon as possible on the Palmer Playing Field. Much use could be made of these courts at the present time.

The mole-drainage scheme carried out by direct labour at Stoneham and Westwood appeared to improve the pitches that were treated. This drainage will be continued in the Autumn when it is hoped the contractors will have completed the work on the main drains on these fields.

Playing facilities in the east end of the town, where there are no school playing fields, are not satisfactory and we look forward to the development of the Oliver Dixon and Bulmershe Court areas for the schools in this district and for the Technical College. It is disappointing that little is being done (or can be done) at present to provide physical education for the students attending the College.

Swimming. This has been a record year as far as attendances at the baths are concerned. Approximately 47,500 attendances have been recorded thus exceeding the previous highest total by 3,500. This speaks for the interest taken in this subject and for the importance of developing facilities for it whenever that is possible. We are grateful for the Committee's financial assistance to Emmer Green School for their learners' pool. It was most encouraging to find that the school was not daunted by the large share (£550) they were asked to raise of the cost of this bath. There is every likelihood that this will be paid off at an early date. The building of this bath was started too late in the Summer Term to permit any use being made of it before next Spring. The efforts of other schools to raise funds for swimming baths are worth noting.

Geoffrey Field Junior School—£500

Southcote Primary School—£120

The experiment of opening Coley Baths for mixed classes of school children was delayed this year until 24th June due to staffing difficulties. It is difficult to report on the success of the experiment after only a few weeks' trial but the attendance figures for July, while it was in progress, were up by 650 on those for the corresponding period of last year.

Courses, Visits. The following courses were arranged for teachers during the year :—

Primary School P.E.—for Secondary teachers.
Modern Development and Circuit Training—Secondary teachers.
Modern Dance and Movement—Primary teachers.
Games Training—Hockey, Netball, Tennis and National Dancing.

Teachers were encouraged to attend holiday courses and a visit was made to a school in Staines where a party of Primary School teachers were able to see Modern Dance and Movement being taught.

In conclusion, we wish to thank everyone who has assisted us in our work during the year.

ROAD ACCIDENTS

We are indebted to Inspector Attrill for the following information :—

During the year there was an increase of six casualties compared with those of the previous year. It is usual for boys to outnumber girl casualties, and in the year 1957 it will be seen the proportion is approximately 2 : 1. Again child cyclist accidents exceed those in the " pedestrian " group, stressing the added danger to which the cyclist is exposed and the need for still more positive instruction in the art of safe cycling.

Analysis of Road Accidents for the year 1957, involving Children of School Age

Month	Boys	Girls	Cyclists	Pedestrians	Passengers	Injury			Total
						Slight	Serious	Fatal	
January ...	3	2	3	2	–	3	2	–	5
February	1	1	2	–	–	2	–	–	2
March ...	7	2	4	5	–	9	–	–	9
April ...	6	1	3	4	–	6	1	–	7
May ...	6	4	6	4	–	7	3	–	10
June ...	6	7	6	7	–	9	3	1	13
July ...	3	–	1	1	1	3	–	–	3
August ...	10	5	8	7	–	12	3	–	15
September	5	3	5	3	–	8	–	–	8
October ...	5	4	5	4	–	4	5	–	9
November	11	4	9	6	–	11	4	–	15
December	6	3	5	4	–	5	4	–	9
Totals	69	36	57	47	1	79	25	1	105

SPECIAL INVESTIGATIONS

(1) **Colour Vision in School Children.** An investigation of colour vision in school children was started in 1957. At present colour vision is tested at the 14 year medical examination. For some time it has been felt that this test was too late

and gave too indefinite a result for sound advice on future employment to be given to the child with defective colour vision.

For the purpose of this investigation children have their colour vision tested on the Ishihara plates and those who fail this test are retested on a lantern test and advised according to the result obtained. It remains to be seen how old a child must be to give an accurate result to the test. One of the difficulties encountered in advising the school leaver is that many industries, where colour perception is important, lay down no standards for employment. Where standards are in use, however, it is hoped to give more definite advice than has been the practice in the past.

(2) **The Tuberculosis Survey.** A survey of Reading School Children and their adult family contacts conducted by the Oxford Regional Hospital Board and the Health Department of the County Borough of Reading.

The Annual Report for 1956 contained a brief account of this investigation which was undertaken with the object of comparing the incidence of tuberculosis among the household contacts of the positive and negative Mantoux reactors of children born in 1943. It will be recalled that as these children were due for B.C.G. vaccination in 1957, which would necessitate further Mantoux testing, it was decided to advance this by some six months so that the two procedures would be coincident. This resulted in 667 of the children taking part in the survey receiving B.C.G. vaccination as well.

The final report of this survey is now quoted and the relevant tables and graphs will be found on pages 42 to 48.

Rationale.—The higher incidence of unknown active tuberculosis among adult contacts of reactor children than of non-reactor children has been established in several investigations. MacDougall, Mikhail and Tattersall (1951, 1953) surveyed 3,798 infant school children (88.7 per cent of those eligible) in Bournemouth of whom 205 were tuberculin reactors. Altogether, 554 contacts of the reactor children were examined and 19 (3.4 per cent) new cases of tuberculosis were found, representing one case for every 200 tuberculin tests applied in the school. This discovery rate if just slightly below that usually found among contacts of known cases (4 to 5 per cent) but much greater than that found among the general population by mass radiography (0.3 to 0.5 per cent). In a similar survey in Sydney, Australia, Mills (1953) investigated 354 contacts over 14 years of reactor children and found 13 (3.7 per cent) unsuspected cases of active pulmonary tuberculosis.

During 1955, a survey involving over 2,000 school children born in 1944 was carried out in East Belfast, Northern Ireland (Ritchie, Calwell and Barr, 1955). Contacts of both reactor and non-reactor children were invited to attend for X-ray examination. Some 37 per cent of the total possible contacts were ultimately X-rayed, and although the response rate was poor, the results available indicated that the incidence of new active post-primary tuberculosis was five times greater in the male family contacts of reactor children than in the male contacts of non-reactors, and it was almost twice as great in the female contacts of reactor children as in female contacts of non-reactors. When both sexes were combined the incidence of active post-primary tuberculosis in the contacts of reactors was three times that found in the contacts of non-reactors. The differences observed between two groups of male family contacts was greater than that which could easily have arisen by chance and this difference was still statistically significant after the data had been standardised for age.

It was not known whether similar results applied within the Oxford Regional Hospital Board Area and the Diseases of the Chest Sub-Committtee of the Joint Medical Advisory Committee, therefore, recommended to the Board that a survey should be undertaken. This survey was carried out in Reading County Borough during the latter part of 1956 and the beginning of 1957. All children born in 1943 in certain schools in the borough were chosen as the sample for investigation. Each child, with the prior consent of the parent or guardian, was tuberculin tested by the

School Medical Services and X-rayed at the Mass Radiography Centre. The Health Visitors of the Health Authority visited the home of the child participating in the survey to collect details of the adult contacts and invited them to attend specially organised mass radiography sessions. The results of the examinations of the children and the adults are analysed in the tables on pages 42 to 48.

Survey Findings.—The potential number of children eligible for inclusion in the survey in each school and the actual number tuberculin tested and X-rayed are shown in Table 1. The relatively low percentage of children tuberculin tested (79.1 per cent of the boys and 77.6 per cent of the girls) against the much higher percentage X-rayed (94.1 per cent of the boys and 93.3 per cent of the girls) indicates that while nearly all parents agreed to having their children X-rayed, about 1 in 4 refused to allow a Mantoux test to be carried out. Both the percentages tuberculin tested and X-rayed were slightly higher among boys than girls.

Tables 2 and 3 give the results of the examination of the children together with percentage distributions. Of the tuberculin tests read, 11.5 per cent of the boys and 9.6 per cent of the girls were reactors. The vast majority of this group had a normal X-ray ; only 1.4 per cent of the boys (5 out of 348) and 2.8 per cent of the girls (10 out of 363) had any chest abnormalities. Six children (2 boys and 4 girls) of those X-rayed had unsuspected active primary tuberculosis while a further 9 (3 boys and 6 girls) had some form of non-tuberculous abnormality. Two cases of active primary tuberculosis occurred in the non-reactor group : of the 9 non-tuberculous abnormalities, 7 were non-reactors and 2 were reactors.

The total known family contacts numbered 2,485 of whom 615 (24.7 per cent) were X-rayed (Table 4). The response was better among women (28.5 per cent, standard of error 1.59 per cent) than among men (20.8 per cent, standard error 1.36 per cent), the difference being significant at the 5 per cent conventional level of probability. In both sexes, the response in the adolescent and young adults up to about 30 years of age was comparatively poor (see diagram). After 35 years the response rate increased in both men and women, but it was 10 per cent higher in women than in men. The best response for women occurred in the 45-49 age group when 38.6 per cent of the potential number attended for X-ray. In contrast, there was little difference in the response rates for men between the ages of 40 and 60 years, when about one in four were X-rayed.

Of the 615 adults X-rayed, 485 were contacts of non-reactor children and 52 contacts of reactors, while the remainder were contacts of children who were not tuberculin tested (Table 5). Among the adults 3 (0.49 per cent) cases of active post-primary tuberculosis and 1 (0.16 per cent) case of active primary tuberculosis were diagnosed (Table 6). In addition there were 12 (1.95) cases with non-tuberculous abnormalities while 7 (1.14 per cent) were referred for further investigation. Although the number of cases is very small, yet for what it is worth, the incidence was nearly five times higher among the adult contacts of reactors than the contacts of non-reactors. Thus, 1 case of active post-primary tuberculosis was found among 52 contacts of reactors giving a rate of 1.92 per cent against 2 cases among the 485 contacts of non-reactors—a rate of 0.41 per cent. If the active primary case found among the contacts of non-reactors is taken into account, then the discovery rate of primary and post-primary tuberculosis becomes 0.62 per cent which is approximately one-third of the rate among contacts of reactors. Strictly speaking, these rates should not be compared unless they have been standardised first for age and sex, but the numbers were too small for such analysis to be made.

Discussion and Conclusions.—Perhaps the only significant fact which emerged from this survey was the high proportion of unsuspected active primary cases found among the school children X-rayed (0.84 per cent). This unexpected finding warrants a reconsideration of the present attitude towards the routine chest X-ray examination of school-leavers.

In so far as can be seen, the results of the examination of the adult contacts were consistent with similar investigations elsewhere, namely, that a higher incidence of active respiratory tuberculosis exists among adult family contacts of reactor children than among similar contacts of non-reactor children. In the present survey, however, the numbers involved were extremely small and for this reason may not be representative. As they stand, they follow in broad terms the findings of the Belfast Survey (Ritchie, Caldwell and Barr, 1955). It will be noted, however, that in Belfast the incidence of adult post-primary disease was higher among the males, whereas in Reading, it was higher for females. There were too few cases to determine if this difference was real or due to chance.

On the other hand, the diagnostic rate among adult contacts of reactors (1.92 per cent) was less than that found in the surveys in Bournemouth (3.4 per cent) and Sydney (3.7 per cent) to which reference has already been made. The differences however, are probably accounted for by the variation in the ages of the children originally selected. For instance, in the Bournemouth survey, 2,289 (60.2 per cent) of the 3,798 children tested were under six years of age. The source of the primary infection of such young children is more likely to be located in the immediate household environment and consequently one would expect a higher discovery rate.

This present survey illustrates, once again, the widespread indifference to mass radiography existing among the general public, especially the young people. Of those under 30 years of age, only 16 per cent attended for a chest X-ray. The percentage attending was better in the older age groups, but even at the best, less than 40 per cent of the possible numbers in any age group were X-rayed. There seems to be little doubt that more extensive propaganda or, possibly a new approach, is required to bring the general public into the mass radiography net.

During the last six months of 1956, the discovery rate of active respiratory tuberculosis requiring treatment or close supervision by mass radiography units operating in England and Wales was 2.2 per 1,000 examinees (Ministry of Health, 1956). The rate (ascertained from a 10 per cent sample of record cards) varied between different groups of the population. It was highest in General Practitioner referrals (12.1 per 1,000) and lowest in school children (0.8 per 1,000). Other high rates were found in persons in prisons, Borstals, etc. (8.6 per 1,000), contacts of tuberculosis cases (3.6 per 1,000) and patients of mental and mental deficiency hospitals (3.1 per 1,000). Compared with these, the rate of discovery among adult contacts of reactors (1.92 per cent) in this survey was high. Although this rate is based upon such small numbers as to be unconvincing, yet it is similar to the rates obtained for larger surveys. It seems reasonable to conclude that the X-raying of adult family contacts of children with a positive tuberculin reaction is a fruitful field of work for the mass radiography service. But, in view of the indifference of the public to mass radiography as shown in this and other reports, any scheme would require careful administrative control to ensure its success.

Summary.—(1) A survey has been made of a group of school children born in 1943 attending schools in Reading together with their adult family contacts.

(2) Each child taking part was tuberculin tested and X-rayed and each adult contact was offered a chest X-ray at the Mass Radiography Unit.

(3) The survey was carried out during the end of 1956 and the beginning of 1957.

(4) There were 909 school children originally selected of whom 712 (78.3 per cent) were tuberculin tested and 852 (93.7 per cent) were X-rayed.

(5) Six cases of active primary tuberculosis were diagnosed among the school children and a further 9 had some form of non-tuberculous abnormality. The incidence of unsuspected active primary tuberculosis was unexpectedly high and should lead to a consideration of the attitude to routine chest X-rays in school leavers.

(6) Of the 2,485 adult contacts, 615 (24.7 per cent) were X-rayed ; the rate of defaulters among the younger ages was higher than among the older.

(7) The numbers were too small to permit an extensive analysis, but from the information available, it would seem that the incidence of pulmonary tuberculosis was some three times greater among adult contacts of reactor children than of adult contacts of non-reactor children.

STATISTICAL DATA

TABLE I

(*A*) Periodic Medical Inspections

Age Groups inspected and Number of Pupils examined in each :—

Entrants	1,516
Second Age Group	1,502
Leavers	1,697
Total ...	4,715
Additional periodic inspections	906
Grand Total	5,621

(*B*) Other Inspections

Number of Special Inspections	1,073
Number of Re-Inspections	2,994
Total	4,067

(*C*) Pupils found to require Treatment

Age Groups Inspected	For defective vision (excluding squint)	For any other conditions	Total individual pupils
Entrants	47	171	206
Second Age Group	88	141	224
Leavers	108	147	246
Total	243	459	676
Addl. Periodic Inspections ...	31	141	151
Grand Total ...	274	600	827

(*D*) Classification of the Physical Condition of pupils inspected in the Age Groups recorded in Table I (*A*)

Age Groups Inspected	Number of Pupils Inspected	Satisfactory		Unsatisfactory	
		No.	% of Col. 2	No.	% of Col. 2
1	2	3	4	5	6
Entrants	1,516	1,510	99.6	6	.3
Second Age Group ...	1,502	1,500	99.8	2	.1
Leavers	1,697	1,695	99.8	2	.1
Addl. Periodic Inspections ...	906	903	99.6	3	.3
Total ...	5,621	5,608	99.7	13	.2

TABLE II

Infestation with Vermin

(*i*)	Total number of individual examinations of pupils in schools by the school nurses or other authorised persons	41,849
(*ii*)	Total number of individual pupils found to be infested	818
(*iii*)	Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	5
(*iv*)	Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	—

Medical Inspection Returns

TABLE III

(*A*) Periodic Inspections

Defect or Disease	Periodic Inspections				Total	
	Entrants		Leavers		(Including all other age groups inspected)	
	Requiring treatment	Requiring observation	Requiring treatment	Requiring observation	Requiring treatment	Requiring observation
Skin	9	13	16	21	37	66
Eyes—						
Vision ...	43	73	119	128	274	285
Squint ...	26	13	8	6	67	50
Other ...	4	7	7	15	14	34
Ears—						
Hearing ...	2	27	2	17	7	65
Otitis Media	6	14	2	12	11	37
Other ...	4	8	4	6	9	22
Nose and Throat	39	126	7	20	64	238
Speech	8	18	1	3	28	40
Lymphatic Glands	4	63	–	6	6	105
Heart	1	24	5	20	10	89
Lungs	12	46	8	31	25	108
Developmental—						
Hernia ...	1	12	2	1	6	21
Other ...	5	12	10	22	23	75
Orthopaedic—						
Posture ...	16	8	21	9	58	31
Feet	15	23	18	33	81	78
Other ...	18	37	43	66	115	191
Nervous System—						
Epilepsy ...	1	1	–	–	4	8
Other ...	4	15	1	7	6	38
Psychological—						
Development	1	9	2	3	4	63
Stability ...	1	9	–	6	4	31
Abdomen ...	–	1	–	1	2	5
Other	2	4	5	4	12	20

Medical Inspection Returns

TABLE III (*continued*)

(*B*) Special Inspections

Defect or Disease	Special Inspections	
	Requiring Treatment	Requiring Observation
Skin	271	7
Eyes—		
Vision	86	93
Squint	23	37
Other	79	13
Ears—		
Hearing	13	43
Otitis Media ...	23	12
Other	53	4
Nose and Throat ...	32	93
Speech	28	26
Lymphatic Glands ...	9	19
Heart	2	29
Lungs	28	55
Developmental—		
Hernia	2	5
Other	13	64
Orthopaedic—		
Posture	10	14
Feet	30	37
Other	34	65
Nervous System—		
Epilepsy	4	16
Other	10	36
Psychological—		
Development ...	11	24
Stability	5	22
Abdomen	17	–
Other	906	23

Medical Inspection Returns

TABLE IV

Group 1—Eye Diseases, Defective Vision and Squint

	Number of cases known to have been dealt with	
	By the Authority	Otherwise
External and other, excluding errors of refraction and squint	70	152
Errors of refraction (including squint)	—	463
Total	70	615
Number of pupils for whom spectacles were prescribed ...	—	380

Group 2—Diseases and Defects of Ear, Nose and Throat

	Number of cases known to have been dealt with	
	By the Authority	Otherwise
Received operative treatment—		
(*a*) For diseases of the ear	—	24
(*b*) For adenoids and chronic tonsillitis	—	349
(*c*) For other nose and throat conditions	—	21
Received other forms of treatment	74	47
Total	74	441
Total number of pupils in schools who are known to have been provided with hearing aids—		
(*a*) In 1957	3	—
(*b*) In previous years	12	25

Group 3—Orthopaedic and Postural Defects

	By the Authority	Otherwise
Number of pupils known to have been treated at clinics or out-patient departments	140	—

Group 4—Diseases of the Skin (excluding uncleanliness for which see Table II)

	Number of cases treated or under treatment during the year by the Authority
Ringworm— (i) Scalp	4
(ii) Body	13
Scabies	22
Impetigo	43
Other Skin Diseases	240
Total ...	322

Group 5—Child Guidance Treatment

Number of pupils treated at Child Guidance Clinics under arrangements made by the Authority	66

Group 6—Speech Therapy

Number of pupils treated by Speech Therapists under arrangements made by the Authority	227

Group 7—Other Treatment Given

(*a*)	Number of cases of miscellaneous minor ailments treated by the Authority	1,198
(*b*)	Pupils who received convalescent treatment under School Health Service arrangements	4
(*c*)	Pupils who received B.C.G. vaccination	524
(*d*)	Other than (*a*), (*b*) and (*c*) above—U.V.L. Therapy ...	38
	Total	1,764

Cases of Infectious Disease in School and Pre-School Children for the year 1957

	At All Ages	Under 1 year	1 and under 3 years	3 and under 5 years	5 and under 10 years	10 and under 15 years
Scarlet Fever	86	–	8	23	47	8
Whooping Cough	127	18	36	34	31	8
Measles	1,650	28	362	653	583	27
Acute Pneumonia (Primary or Influenzal) ...	15	–	2	5	5	3
Cerebro Spinal Fever	–	–	–	–	–	–
Acute Poliomyelitis (Paralytic)	20	–	4	5	11	–
Acute Poliomyelitis (Non-Paralytic)	22	–	1	6	9	6
Diphtheria	–	–	–	–	–	–
Enteric or Typhoid Fever (excluding Paratyphoid) ...	–	–	–	–	–	–
Food Poisoning	13	–	3	1	5	4
Erysipelas	–	–	–	–	–	–
Dysentery	81	1	15	16	34	15
Meningococcal Infection	2	1	1	–	–	–
Acute Encephelitis (Infective)	1	–	1	–	–	–
	2,020	48	433	743	725	71

TABLE 1—Number of School Children in Survey and Number and Percentage Tuberculin Tested and X-rayed

Name of School	Number in Survey		Number Tuberculin Tested		Number Attending M.M.R.		PERCENTAGE			
							Tuberculin Tested		X-rayed	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Ashmead	96	–	73	–	87	–	76.0	–	90.6	–
Alfred Sutton Boys ...	69	–	52	–	66	–	75.4	–	95.7	–
Alfred Sutton Girls ...	–	53	–	44	–	50	–	83.0	–	94.3
The Avenue	8	4	8	3	8	3	100.	75.0	100.	75.0
Battle	32	31	27	23	30	28	84.4	74.2	93.8	90.3
Caversham	36	43	28	36	35	41	77.8	83.7	97.2	95.3
E. P. Collier	24	27	22	23	24	27	91.7	85.2	100.	100.
George Palmer Girls ...	–	98	–	66	–	87	–	67.3	–	88.8
The Grove	34	15	26	12	31	15	76.5	80.0	91.2	100.
Katesgrove	20	15	15	11	19	13	75.0	73.3	95.0	86.7
Kendrick	–	67	–	63	–	67	–	94.0	–	100.
Redlands	14	11	12	8	14	10	85.7	72.7	100.	90.9
St. Anne's R.C. ...	3	6	3	5	3	6	100.	83.3	100.	100.
St. James' R.C.	3	–	2	–	3	–	66.7	–	100.	–
Stoneham	101	–	80	–	94	–	79.2	–	93.1	–
Wilson	–	99	–	70	–	91	–	70.7	–	91.9
All Schools ...	440	469	348	364	414	438	79.1	77.6	94.1	93.3
	909		712		852		78.3		93.7	

TABLE 2—Results of Tuberculin Test and X-ray of School Children Surveyed with Percentage Results of Tuberculin Test

Result of Chest X-ray	Result of Tuberculin Test				Total Tested		Not Tested		Grand Total	
	Negative		Positive							
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Normal	305	321	38	31	343	352	63	73	406	425
% tested	88.9	91.2	11.1	8.8	100.	100.	–	–	–	–
%total	75.1	75.5	9.4	7.3	84.5	84.8	15.5	17.2	100.	100.
Active primary tuberculosis	1	1	1	3	2	4	–	–	2	4
% tested	50.0	25.0	50.0	75.0	100.	100.	–	–	–	–
% total	50.0	25.0	50.0	75.0	100.	100.	–	–	100.	100 .
Non-tuberculous abnormality ...	2	5	1	1	3	6	2	2	5	8
% tested	66.7	83.3	33.3	16.7	100.	100.	–	–	–	–
% total	40.0	62.5	–	12.5	60.0	75.0	40.0	25.0	100.	100.
Not X-rayed	–	1	–	–	–	1	26	30	26	31
% tested	–	100.	–	–	–	100.	–	–	–	–
% total	–	3.2	–	–	–	3.2	100.	96.8	100.	100.
Total	308	328	40	35	348	363	91	105	439	468
% tested	88.5	90.4	11.5	9.6	100.	100.	–	–	–	–
% total	70.2	70.0	9.1	7.5	79.3	77.6	20.7	22.4	100.	100.

Excludes 2 cases where results of test or X-ray were not stated

TABLE 3—Results of Tuberculin Test and X-ray of School Children Surveyed with Percentage Results of X-ray

Result of Tuberculin Test	RESULT OF CHEST X-RAY											
	Active Primary Tuberculosis		Non-tuberculous Abnormality		Normal		Total X-rayed		Not X-rayed		Grand Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Negative ...	1	1	2	5	305	321	308	327	–	1	308	328
% X-rayed ...	0.3	0.3	0.7	1.5	99.0	98.2	100.	100.	–	–	–	–
% total ...	0.3	0.3	0.7	1.5	99.0	97.9	100.	99.7	–	0.3	100.	100.
Positive ...	1	3	1	1	38	31	40	35	–	–	40	35
% X-rayed ...	2.5	8.6	2.5	2.9	95.0	88.6	100.	100.	–	–	–	–
% total ...	2.5	8.6	2.5	2.9	95.0	88.6	100.	100.	–	–	100.	100.
Not tested	–	–	2	2	63	73	65	75	26	30	91	105
% X-rayed ...	–	–	3.1	2.7	96.9	97.3	100.	100.	–	–	–	–
% total ...	–	–	2.2	1.9	69.2	69.5	71.4	71.4	28.6	28.6	100.	100.
Total	2	4	5	8	406	425	413	437	26	31	439	468
% X-rayed ...	0.5	0.9	1.2	1.8	98.3	97.3	100.	100.	–	–	–	–
% total ...	0.5	0.9	1.1	1.7	92.5	90.8	94.1	93.4	5.9	6.6	100.	100.

TABLE 4—Age and Sex Distribution of Total Family Contacts, the Number Attending for X-ray and the Response Rates

Age Group of Contact (years)	Total known family contacts			Contacts X-rayed			Response rates (%)		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15—	39	37	76	6	3	9	15.4	8.1	11.8
20—	164	220	384	19	47	66	11.6	21.4	17.2
25—	69	42	111	8	8	16	11.6	19.0	14.4
30—	25	14	39	4	2	6	16.0	14.3	15.4
35—	61	122	183	10	32	42	16.4	26.2	23.0
40—	160	250	410	41	86	127	25.6	34.4	31.0
45—	282	264	546	74	102	176	26.2	38.6	32.2
50—	208	167	375	55	56	111	26.4	33.5	29.6
55—	82	66	148	20	17	37	24.4	25.8	25.0
60—	48	25	73	8	9	17	16.7	36.0	23.3
65+	50	66	116	5	2	7	20.0	3.0	6.0
Not stated	15	9	24	–	1	1	–	–	–
Total ...	1,203	1,282	2,485	250	365	615	20.8	28.5	24.7

TABLE 5—Response of Adult Contacts Analysed by Result of Tuberculin Test of the Child

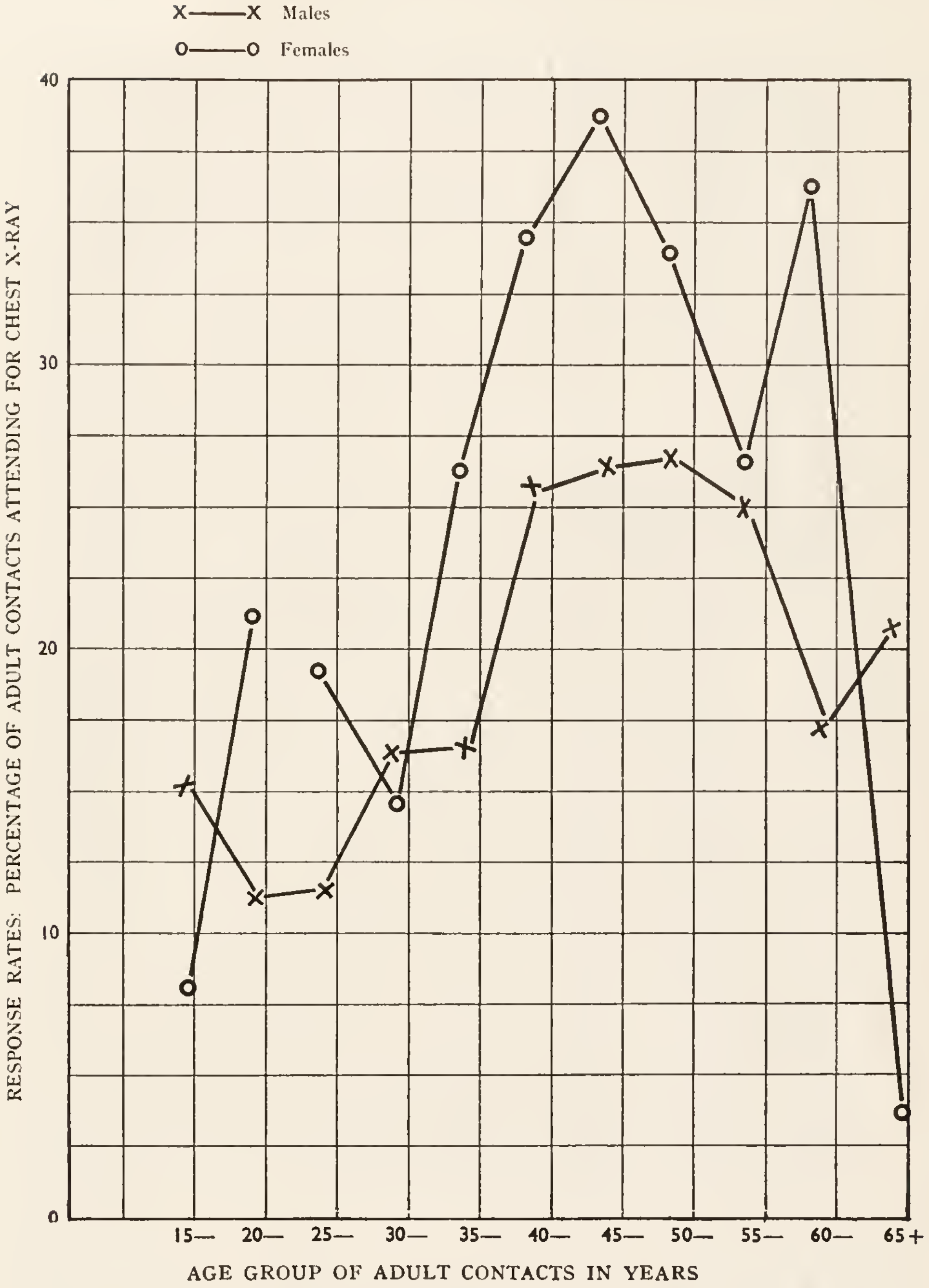
Result of Tuberculin Test of Child		ADULT CONTACTS								
		Males			Females			Both Sexes		
		X-rayed	Not X-rayed	Total	X-rayed	Not X-rayed	Total	X-rayed	Not X-rayed	Total
Negative	Number	201	655	856	284	603	887	485	1,258	1,743
	Per cent	23.5	76.5	100.	32.0	68.0	100.	27.8	72.2	100.
Positive	Number	19	73	92	33	67	100	52	140	192
	Per cent	20.7	79.3	100.	33.0	67.0	100.	27.1	72.9	100.
Not stated	Number	1	–	1	1	–	1	2	–	2
	Per cent	100.	–	100.	100.	–	100.	100.	–	100.
Not tested	Number	29	225	254	44	248	292	73	473	546
	Per cent	11.4	88.6	100.	15.1	84.9	100.	13.4	86.6	100.
Total ...	Number	250	953	1,203	362	918	1,280	612	1,871	2,483
	Per cent	20.8	79.2	100.	28.3	71.7	100.	24.6	75.4	100.

Excludes 3 female contacts where information was incomplete

TABLE 6—Result of Chest X-ray of Adult Contacts Classified According to the Result of Tuberculin Test of School Child

Result of Mantoux Test of Child		RESULT OF CHEST X-RAY OF FAMILY CONTACTS											
		Normal		Tuberculosis Primary		Tuberculosis Post-Primary		Referred for further investigation		Non-Tuberculous abnormality		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Negative	Number	193	271	–	1	1	1	4	3	3	8	201	284
	Per cent	96.0	95.4	–	0.4	0.5	0.4	2.0	1.1	1.5	2.8	100.	100.
Positive	Number	19	32	–	–	–	1	–	–	–	–	19	33
	Per cent	100.	97.0	–	–	–	3.0	–	–	–	–	100.	100.
Not stated	Number	1	1	–	–	–	–	–	–	–	-	1	1
	Per cent	100.	100.	–	–	–	–	–	–	–	–	100.	100.
Not tested	Number	29	43	–	–	–	–	–	–	–	1	29	44
	Per cent	100.	97.7	–	–	–	–	–	–	–	2.3	100.	100.
Total ...	Number	242	347	–	1	1	2	4	3	3	9	250	362
	Per cent	96.8	95.9	–	0.3	0.4	0.6	1.6	0.8	1.2	2.5	100.	100.

RESPONSE RATE OF ADULT CONTACTS BY AGE AND SEX



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